

# KONARK

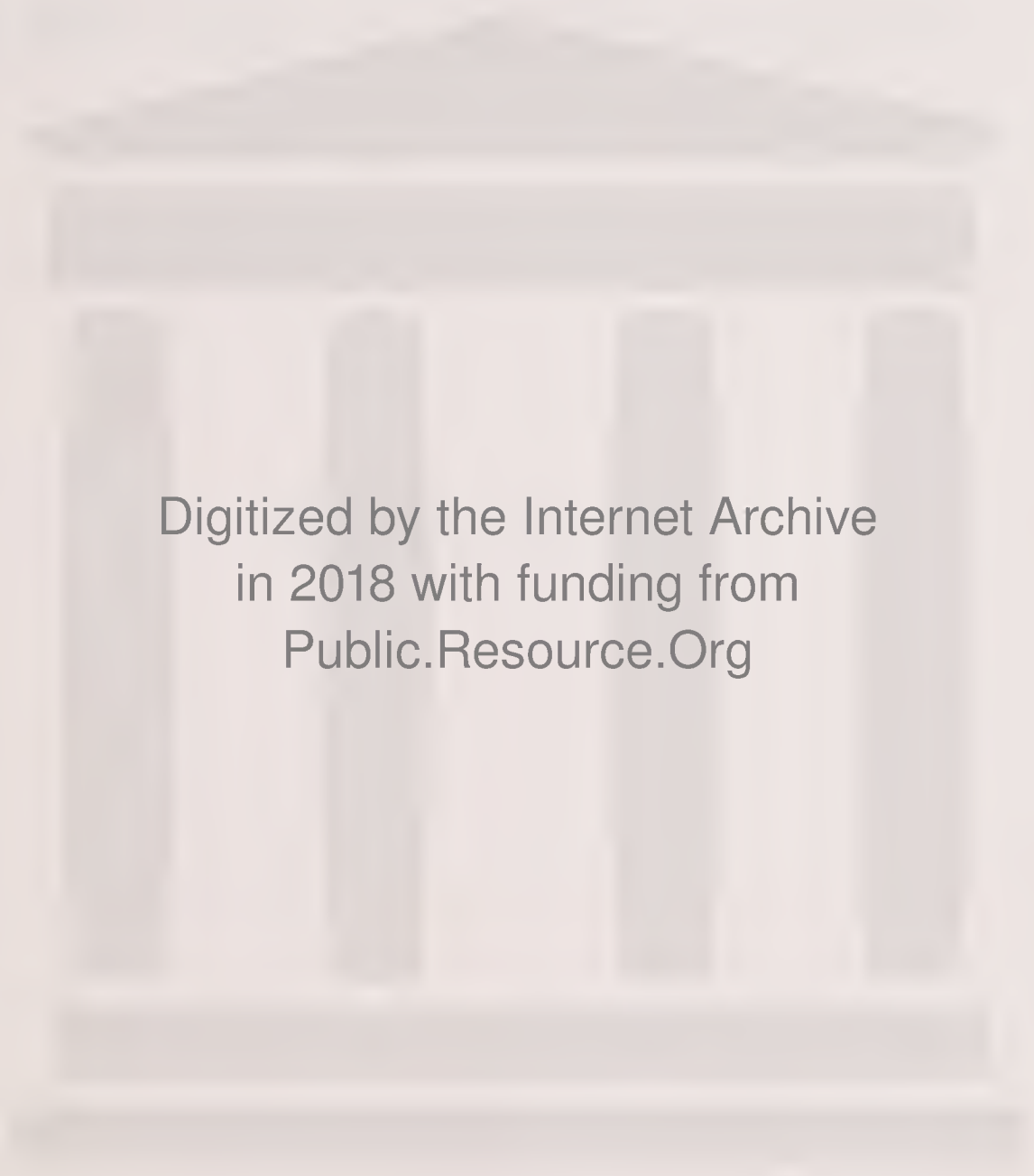
## THE BLACK PAGODA

**Karuna Sagar Behera**









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# **KONARK THE BLACK PAGODA**

**K. S. BEHERA**



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## PREFACE

The Sun temple of Konark in Orissa, once famous as the Black Pagoda, is undoubtedly one of the finest monuments of mankind. But sadly, however, this great temple, built in the mid thirteenth century, is now in ruins. In 1626 it was already deserted and worship had ceased. The main temple, which was even higher than the jagamohana or vestibule, gradually disintegrated and its remaining fragment was brought down by a strong gale in October, 1848. Its magnificent wheels remained underneath the sand in the 19<sup>th</sup> century. The jagamohana remains more or less intact, even that has been filled with sand in 1903 by the order of J.A. Baurdillon, then Lieutenant governor of Bengal, as this was considered to be the only way to preserve the monument. The natamandira or dance hall of the temple is without its superstructure.

Even in ruins, Konark is a magnificent monument, where the vitality and spirit of a creative age in the history of Orissa are echoed in its sculptures even long after that time is buried in the past. Sir John Marshall remarked, "there is no monument of Hinduism, I think that is at once so stupendous and so perfectly proportioned, as the Black Pagoda, and none which leaves so deep an impression on the memory". The temple was declared a centrally protected monument in March 22, 1915. It has been included in the list of World Heritage sites in 1984 for its outstanding universal value to humanity.

Over the centuries, legends and oral traditions, made this monument more and more mysterious. Perhaps few temples in India have remained as controversial as Konark in vital matters such as construction, worship, and causes of its downfall. Did the builders finish the temple? Was it consecrated? When did the temple fall down? What are the outstanding features of Konark? A number of questions arise which form a popular subject of discussion among the scholars and common people.

This monograph has been written with broad object to discuss all aspects of Konark, its mythology, religious importance, history, architecture, sculpture and its conservation.

In the preparation of the volume I have extensively used existing

published monographs on the subject and important material available in various institutions. However, due to constraint of space, the footnote reference have been avoided and the sources of the quoted statements may be found in my earlier monograph on Konark which was published in 1996 and in the bibliography. My understanding of the monument owes a great deal to my extensive field study and long association with Konark. I hope that this concise and coherent narrative will help general readers and all those who want to know Konark in a proper perspective.

I would like to thank the authorities of the Archaeological Survey of India, National Museum, New Delhi, British Museum, London. Victoria and Albert Museum, London, Museum Rietberg, Zurich, India Office Library, London, British Library London, for photographs, important information and facilities. I am especially grateful to S. Digby and J.C. Harle for their valuable illustrations on Konark, published in South Asian Studies and to Durga Charan Pati, former Chief Engineer, Gopalpur Port, Orissa, for drawing my attention to drawings of the Black Pagoda contained in the log books of voyages in 1679-80. Dr. Sanjay Acharya, my colleague in the Department of Ancient Indian History, Culture and Archaeology, Utkal University, Bhubaneswar provided valuable photographs and helped me in many ways for which I wish to thank him.

I would like to thank my family members, Shantipriya Behera (Wife), Soumyadarshan (Son), Madhusmita (daughter in law), Prajnaparamita (daughter) and Bijaya Kumar (son in law) for their support. My grand children – Abhijit, Ajitabh, and Anushka-provided a happy atmosphere for my work.

I am grateful to the Publications Division, Govt. of India, for giving me this opportunity to revisit Konark and write a concise volume in the light of the latest research on the subject.

Bhubaneswar

Sunday, July, 18, 2004

**Karuna Sagar Behera**



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# MYTHOLOGY AND THE SANCTITY OF KONARK

The name 'Konark' as the name of the place, seems to have been derived from the presiding deity 'Konark' which means the Sun god of the corner, 'Arka' denotes Surya and 'Kona' means corner. Hence Konark means the 'Corner Sun'. In the Ganga inscriptions, the place is mentioned as Konakona. In the *Bhavisya Purana*, the Sun god is called Kona Vallabha. The *Brahma purana*, applies the terms Konark and Konaditya, both denoting the 'Corner Sun'. It appears that 'Kona' is used to mean the South-East corner. The Brihatsamhita of Varahamihira placed Kalinga in the South-East (Agnayam disi), Sarala Das in his Oriya Mahabharata (15<sup>th</sup> century) gives a story relating to Konark. He holds that as the demon Arka was killed by the Sun god in the Agnikona (South-East corner) of the earth, the place became famous as Konark. This seems to suggest that the word Kona denoted the South-East direction. In major temples of Orissa, such as the Lingaraja and the Jagannatha temple, the Sun god is worshipped in the Agnikona.

Apart from Konark, there are places ending with Arka such as Lolarka, Balarka (both in Uttar Pradesh), and Kotyarka in Gujarat. Konark, however, is not the only name by which the site of the temple was known in former times. It had other names such as Arkatirtha, Bhaskaratirtha, Ravi kshetra, Surya kshetra, Mitra Varia, Maitreya Vana, Padma kshetra, etc. Even now in Iran a place is called Konark (25<sup>o</sup>, 4 north 60<sup>o</sup>, 4 east), which is an important weather forecasting center.

The traditional story regarding the erection of the first Sun temple at Mitravana is recorded in the Samba Purana. Samba, the son of Krishna, was very proud of his handsome appearance and once ridiculed sage Narada. Narada led Samba into a trap to

take revenge. Samba was persuaded to visit the bathing place of gopis. Meanwhile Krishna came to the spot and cursed Samba to be afflicted with leprosy. Samba begged forgiveness and explained his innocence. Krishna took pity on him and advised him to proceed to Mitravana on the bank of the Chandrabhaga river to propitiate Surya to get rid of the skin disease. Samba performed penance for twelve years, and through the grace of the Sun god regained his personal charm and was cured of leprosy. In gratitude he erected a temple for the Sun god and as local priests were not suitable to perform the daily rites, he brought maga Brahmanas from Sakadvipa (North-East Iran) to conduct the sacred rituals. The Chandrabhaga is a tributary of the Indus, the site of the first Sun temple was Mulastha or modern Multan in Punjab. Hsuan Tang in the 7<sup>th</sup> century and Alberuni in the 11<sup>th</sup> century, refer to the Sun temple at Multan. The site in view of its association with Samba, came to be known as Samba pura.

With the progress of Sun worship in India, Sun temples stand centers of Sun worship developed in different parts of India. Modhera (in Gujarat) and Martand (in Kashmir), among others, came to possess temples in honour of the Sun god.

Sun worship became popular in Orissa from an early period. The Jaiminiya Grihasutra mentions that the Sun god was born in Kalinga (Jatam Arka Kalingesu). A sixth century inscription discovered from Sumandala in Orissa, mentions king Dharmaraja, as a devotee of Sahasra rasmi or the Sun god. Sun images represented in the temple sculptures of Parsuramesvar (7<sup>th</sup> century) Vaital (8<sup>th</sup> century), Muktesvara (10<sup>th</sup> century), Lingaraja (11<sup>th</sup> century) and detached images at various places indicate the widespread influence of Sun worship in Orissa. Anangabhimha III, the father of king Narasimha I, is known to have granted land to Brahmanas according to the recommendations of the Aditya Purana. The climax of Sun worship, however, was reached when king Narasimha-I, built the Sun Temple of Konark in the mid-thirteenth century.

The Puranas mention three famous centers of Sun worship in ancient India. The three famous places of Bhaskara (the Sun



god), according to *Bhavisya Purana* are Mitravana, Mundira and Kalapriya. Sometimes, in the same purana, Mundira is substituted by Sundira Svamin/Pundiravamin for Mundira Svami and Sutira. In one Chapter Mulasthana is mentioned in place of Mitravana. At one place in the *Bhavisya Purana* (I.129.16) the Sun god declared “The people will notice my presence at Sutira in the forenoon, at Kalapriya in the noon and here (at Mitravana) in the after noon”.

The *Varaha Purana* mentions that Samba installed images of Surya at Udayachala, at Kalapriya on the Southern bank of Yamuna, and at Mulasthana on the Astamanachala. Thus according to the *Varaha purana* the three places of Sun-worship are Udayachala, Kalapriya and Mulasthana.

The *Skanda Purana* mentions that the Sun god appears at Mundira, located in the Eastern quarters, in the morning, at Kalapriya in the noon and in the evening at Mulasthana. The *Skanda Purana* also says that the Sun god remains in the morning at Ganga-Sagara sangama as Mudirasvamin. The three places of Sun-worship mentioned in different versions of the *Skanda purana* are (1) Mundira or Mudirasvamin (2) Kalapriya and (3) Mulasthana.

The Puranic passages thus support that three forms of Surya were worshipped at three places, i.e. rising Sun at Sutira/Mundira/Udayachala, the mid-day Sun at Kalapriya, and the setting Surya at Mulasthana/Mitravana. Mulasthana is obviously identical with Multan, here Samba erected the first temple in honour of Surya. V.V. Mirashi identified Kalapriya with modern Kalpi, situated on the bank of the Yamuna river. He suggests that Kalapriyanatha, mentioned in the plays of Bhavabhuti could be the Sungod of Kalpi. The courtyard of the temple of Kalapriya is also mentioned in the Cambay plates of Rashtrakuta King Govinda III. It may be suggested that Mundira, Sutira and Udayachala of the puranas could be close to or identical with the site of Konark. Udaychala of the *Varaha purana* denotes the mythical mountain of Sun rise. Sutira of the *Bhavisya Purana* literally means ‘beautiful shore’, and as Mundira is another name of Sutira, both the places may

be considered identical with Konark, located very near, the shore of the Bay of Bengal. The statement of the Skanda purana that the Sun god Munderasvamin remains in the morning at Gangasagar Sangama should not be confused with the mouth of the Ganga. The Padma Purana mentions Ganga-sagara sangama near Purusottamakshetra or Puri. It may be the place where the river Chandrabhaga falls into the sea. The Oriya Ramayana of Balaram Das (16<sup>th</sup> century) mentions Chandrabhaga Sangama tirtha, which may be located near the site of Konark. The Samba purana in Chapter 43, explains the term Mundira (anena munditah sarve tena mundira uchnyate). This chapter is generally considered to be a later addition. It speaks of the Sun god Mundira as the presiding deity of Tapovana. The Purana extols the merit of worshipping the rising Sun there. Those, who see the rising Sun god Bhanu will attain salvation, those who see the Sungod Mundira early in the morning will remain free from fear (bhaya), misery (soka) and illness (roga). According to the Samba purana the Sun god Mundira, installed in the Tapovana, was located on the shore of the salt ocean. The Purana gives vivid description of the Sunrise; how the earth, sea and the sky became red with the ray of the rising Sun, which appeared in two forms-one remaining in the ocean and the other shining in the sky. Vaivasvata Manu recovered the deity from the ocean and built a temple for him. Further, it is said that the image of the Sun god, constructed by Visvakarman, was first placed in the Himalaya being successively carried by rivers such as Chandrabhaga, Vipasa, Satadru, Yamuna Jannhavi (the Ganga) and Modaganga (Mahanadi) reached the salt ocean. The Samba purana is silent about Konark, but the Tapovana, also called Mitra Vana. Ravi Ksetra and Surya Ksetra, said to be situated on the shore of the salt ocean may be considered identical with the modern site of Konark. The Brihat Kathakosa by Harisena (10<sup>th</sup> century) mentions Mundira, Kalapriya and Mulasthana as three important centers of Sun-worship and it places Munderasvami on the Purva Varidhi or the Eastern ocean. The Sun god Mundira was evidently worshipped at the sea shore near Konark. It is probable that in a later period



Mundira or Mundirasvamin was replaced by Konark or Konaditya.

In general, the Puranas are assigned to the Gupta period (4<sup>th</sup> – 6<sup>th</sup> century) but additions were made in later periods and it is difficult to be precise about the dates of different chapters. R.C. Hazra, well known authority on the Sanskrit puranas assigned the oldest part of the *Samba Purana* between 500-800 A.D. and as the three famous centers of Sun worship such as Mundira, Kalapriya and Mitravana are mentioned in this section, it seems probable that the site of Mundira was known by that period. By the middle of the 10<sup>th</sup> century, as the evidence of the *Brihat Kathakosa* shows Mundirasvemin, the Sun god, was worshipped in the shore of the eastern sea. In the absence of any archaeological excavation at Konark, the antiquity and culture sequence of the site is not known. It is believed that the site was known to Ptolemy (2<sup>nd</sup> century A.D.) as Kanagara. The sanctity of Konark, prior to the Sun temple built by king Narasimha-I, is substantiated by both literary and archaeological evidence. The Arab geographers such as Abul Faraj (9<sup>th</sup> century) and Gardizi (11<sup>th</sup> century) refer to the worshipper of the Sun and a famous Sun temple which may refer to the Surya Deula of Konark, Albruni (11<sup>th</sup> century) in his account of India, mentions Arkutirtha, the land of Uwaryahar and Urdabishau on the borders of the sea. The reference is evidently to the Arkatirtha or Konark of the Odra country. The *Mitaksara* of Vijnanesvara (1080-1199 A.D.), mentions Bhaskara Ksetra and P.V. Kane identifies it with Konark. The traditions of Orissa, recorded in the *Madala Panji* attributes the construction of a Sun temple at Konark to Purandara Kesari of the Kesari dynasty who may be identical with the Somavamsi king, Puranjaya (C. 1085-1100 A.D.).

### **Sthala Mahatmyas on Konark**

With the construction of the Sun temple by Narasimha-I, several texts seem to have been composed to highlight the religious importance. These were called *Ksetramahatmyas* or *Sthalamahatmyas* i.e. glorification of the place. For greater



authenticity, some of the *mahatmyas* are incorporated in the well known Puranas.

The *Samba Purana*, an Upapurana in Sanskrit, is an important text on Sun-worship. The work, however, does not specifically mention Konark. The text gives the traditional story of Samba and erection of the first Sun temple at Mitravana on the bank of Chandrabhaga (Chenab) in the Punjab. The *Samha purana*, however, in the interpolated chapters 42-43, mentions Tapovana on the shore of the salt ocean. It is considered highly meritorious to worship Sungod Mundira in the morning. In the interpolated chapter Tapovana is also designated as Ravi ksetra, Surya Ksetra and Mitra Vana. Its sanctity was even greater than that of Mitravana of the Punjab. It is said that Vaivasvata Manu had built the temple for the Sun god, and Samba, did not construct the temple of Mundira but merely visited the place. The *Brahma Purana*, contains *Ksetra Mahatmnyas* of Konoditya is found in the twenty-eight chapter. The Ksetra of Konaditya, is located in the Odradesa on the shore of the Southern sea. The text refers to the mode of worship which include bath in the sea, pradakshina of the temple for three times, and worship of Konark with *puspe, dhupe, dipa, naivedya, dandavata, pranipata* etc. The *Brahma purana* uses both Konaditya and Konark, indicating its popular use. In the Indian traditions the Sun god is known by various names such as Aditya, Savita, Surya, Mihira, Arka, Prabhakara, Marttanda, Bhaskara, Bhanu, Chitrabhanu, Divakara and Ravi. Hence Konaditya and Konark of the *Brahma purana* denote the same deity. Among the festivals celebrated in honour of Konaditya, the *Brahmapurana* describes the rites of Magha Saptami performed on the 7<sup>th</sup> day of the bright fortnight of the month of Magha and Madana Bhanjika in the bright half of the month of Chaitra. The *Brahmapurana* recommends journey to the ksetra of konaditya on the occasion of Ayana, Uithapana, Samkranti Uttarayana, Ravi vara, Septami tithi, and during festivals in order to attain Suryaloke. The text mentions Ramesvara on the shore of the ocean, and one should worship him after bath in the mahodadhi (sea).

The Konaditya *ksetra mahatmaya* of the *Brahma purana* seems to have been written in the 13<sup>th</sup> century as there is a direct reference to the Sun temple visited by the pilgrims.

The *Kapila Samhita*, a later Orissan text, describes four ksetras of Krisna, (Purusotama Kshetra), Arka (konark), Parvati (Jaipura), and Hara (enshrined in Ekamra-Bhubaneswar). The text seems to have been composed in the 15<sup>th</sup> century.

The *Kapila Samhita* shows that the *Maitreyavana* or Konark was in a flourishing condition as an important *tirtha* of the Hindu world. The entire sixth chapter of the *Kapila Samihita* is devoted to the description of the Ksetra of Konark. It gives the story of Samba in a shorter form than is to be found in the *Samba-Purana*. Samba worshipped Surya at Maitreyavana (identified with Konark) for twelve years and was cured of his leprosy. After giving this legend, the *Kapila Samhita* speaks of the glory and sanctity of the ksetra. Those who behold the Sun-god at Ravi ksetra with devotion on a Sunday, would go to the realm of the Sun. Those who worship Bhaskara there with devotion, would become immediately sinless and their cherished desires would be fulfilled. It is evident from the *Kapila Samihita* that car festival was celebrated at Konark. It also refers to other sacred spots in the ksetra, such as Mangala tirtha, Salmali Bhandra, Surya Ganga, the Sea, Ramesvara Siva, the river Chandrabhaga and the Arka vata. Of these, the first two were the sacred tanks where pilgrims were enjoined to take their ceremonial bath. The *Surya samuchaya* mentions the *Snanavakya* (text to be uttered before taking the bath) at mangala tirtha and recommends that, after bathing, one should pay homage to the form of Siva named Mangalesvara. The shrine of Ramesvara, mentioned in the *Kapila Samhita* is of much earlier date, for its finds mention in the *Brahmapurana*. The Chandrabhaga and the Arka-vata are also mentioned in the Oriya *Mahabharata* of Sarala Das. The Surya Ganga of the *Kapila Samhita* was probably another name of the river Chandrabhaga which flowed near the temple. This may be inferred from Gadadhara Rajaguru's *Gadadhara Paddhati*, which on the basis of Bhavisya-purana, says that any stream lying to



the east of a Sun-temple should be known as the Surya Ganga.

The importance of Konark as a celebrated centre of Sun worship was known in other parts of India. The *Pramana Pallava*, a manuscript discovered from Mirthila (Bihar) and ascribed to Narasimha (13<sup>th</sup> century) mentions Konark, along with other notable tirthas such as Prayag, Gaya, Purusottam, etc. The sanctity of Konark is also mentioned in several later texts such as *Tirtha Chintamani* of Vachaspati Misra (15<sup>th</sup> century), *Tirthasara* of Nrismha Prasad (1490-1515) and *Purusottam* of Raghunandana (16<sup>th</sup> century).

In 1815 Colonel Colin Mackenzie, collected from Orissa a manuscript named *Konarka ksetra mahatmya*. It seems to be part of a larger text which is not available in the complete form. It quotes the legend of Samba in Oriya. It quotes passages from the *Brahma Purana*, *Samba Purana* and *Padma Purana* to emphasize the religious importance of Konark. The sacred complex of Konark is said to be five krosa (10 miles) in extent and it had shrines of eight Sambhus and eight chandis. W.W. Hunter has mentioned two texts relating to Konark. The *Arka Mahatmya*, a Sanskrit text is attributed to be Gopal Bhanja, who was a contemporary of king Narasimha Dev. The work, according to Hunter, describes the sanctity and building of the temple. Both the texts are not available now for study. Another unpublished work, entitled *Arka Ksetra Mahatmya*, is assigned to the Ganga period, but the same also is not available now. It appeared that after the thirteenth century, several ksetra Matmyas were composed to glorify the sanctity of Konark.

In the later texts the Samba legend came to be associated with the temple obviously to add to the sanctity of the place.

As the Mitravana was considered to be the original seat of the Sun-god (*Adyam Sthanam*), attempts were made to transplant the Samba legend to other centers of Sun-worship. Samba legend is associated with Prabhasa ksetra in Gujarat. At Jhallar Patan in Rajasthan a river has been named Chandrabhaga and on its bank stands a Sun temple belonging to the 10<sup>th</sup> century. A fair is held there in honour of Surya. This also happened in the case of



Konark. As the original temple built by Samba was situated near the Chandrabhaga river, a river flowing near the Konark temple was also named Chandrabhaga. In the present state of our knowledge we cannot be certain as to when the Samba legend came to be associated with Konark. We presume that it happened when Konark became popular with the decline of the original Mitravana of the Punjab. The *Samba Purana* in its chapters 42-43 refers to the Tapovana of the Sun-god on the sea shore and not on the bank of the Chandrabhaga river. In the Purana, we are told that Samba did not construct the temple for Mundira, but merely visited the place, which had long been in existence. The *Brahma Purana* in its chapters dealing with the ksetra of Konaditya, however, describes Mitravana (identical with Konark) as being situated on the bank of the Chandrasarit with verses borrowed from the *Samba Purana*. This indicates that by this time Mitravana had come to be located in Orissa. The *Hitopadesa*, said to have been composed by Narayana Pandita (c 14<sup>th</sup> Century A.D.) refers to the Chandrabhaga in connection with the expeditions of king Rukmangada of Kalinga visaya. The *Kapila Samhita* associates the Samba legend with Maitreyavana or Konarka; the text also locates the Chandrabhaga in the ksetra of Konarka. According to Sarala's *Mahabharata*, Narada advised Samba to worship the Sun god at *Konark Tirtha*.

From this it is evident that by the 15<sup>th</sup> century the Samba legend was already well-associated with Konark. The Brahmanda Purana a late Sanskrit text also locates Chandrabhaga at Konark and mentions that Samba propitiated Surya there. Thus Konark came to be known as Mitravana and replaced the sanctity and glory of the original Mitravana.

The great Sun temple is now in ruins. Yet the people of Orissa, celebrate once in a year the Magha Saptami festival at the Chandrabhaga and visit the temple as pilgrims did in the past, reminding us how the temple existed eight hundred years ago.

# KING NARASIMHA-I AND CONSTRUCTION OF THE KONARK TEMPLE

Narasimha-I is famous in history as the builder of the Konark temple. The great temple of the Sun god, now known as Konark, is the most celebrated of the monumental buildings of that time, and a lasting symbol of the ambitious enterprise and achievements of Narasimha-I. He belonged to the Eastern Ganga dynasty of Kalinga. Earlier, the Gangas had their capital at Kalinganagara (Mukhalingam) in Andhra Pradesh. In the beginning of the 12<sup>th</sup> century, Anantavaraman Chodaganga Deva occupied coastal Orissa. He is credited with the construction of the great temple of Jagannath at Puri.

Narasimha-I was the most powerful ruler of the Ganga empire. He ruled from Cuttack, the city of power and culture. Narasimha-I, was the son of Anangabhimba III (1211-38) by his wife Kastura Devi and he came to the throne in 1238 A.D.

Narasimha-I assumed power at a crucial period of Orissa history when powerful neighbours, both in the North and the South, attempted to invade Orissa. His greatest rival in the North was Bengal ruled by the Muslims. In the South, he inherited war with the Kakatiya ruler Ganapati Deva (1198-1261). Almost from the beginning of his reign, Narasimha-I had to undertake an ambitious programme of war against the Kakatiya rule. It was a prolonged war with claims and counter claims of victory for both sides. In an inscription on the Lingaraja temple, king Vira Nara Kesari i.e. Narasimha-I, is said to have terrified the general of Ganapati, who sent an army consisting of infantry, cavalry and elephants. Narasimha also came into conflict with Jatavarman Sunder Pandya. Narasimha seems to have sent an expedition to Kanchi





General view of the Sun Temple from Southeast



View of the platform wall with one of the twenty four wheels





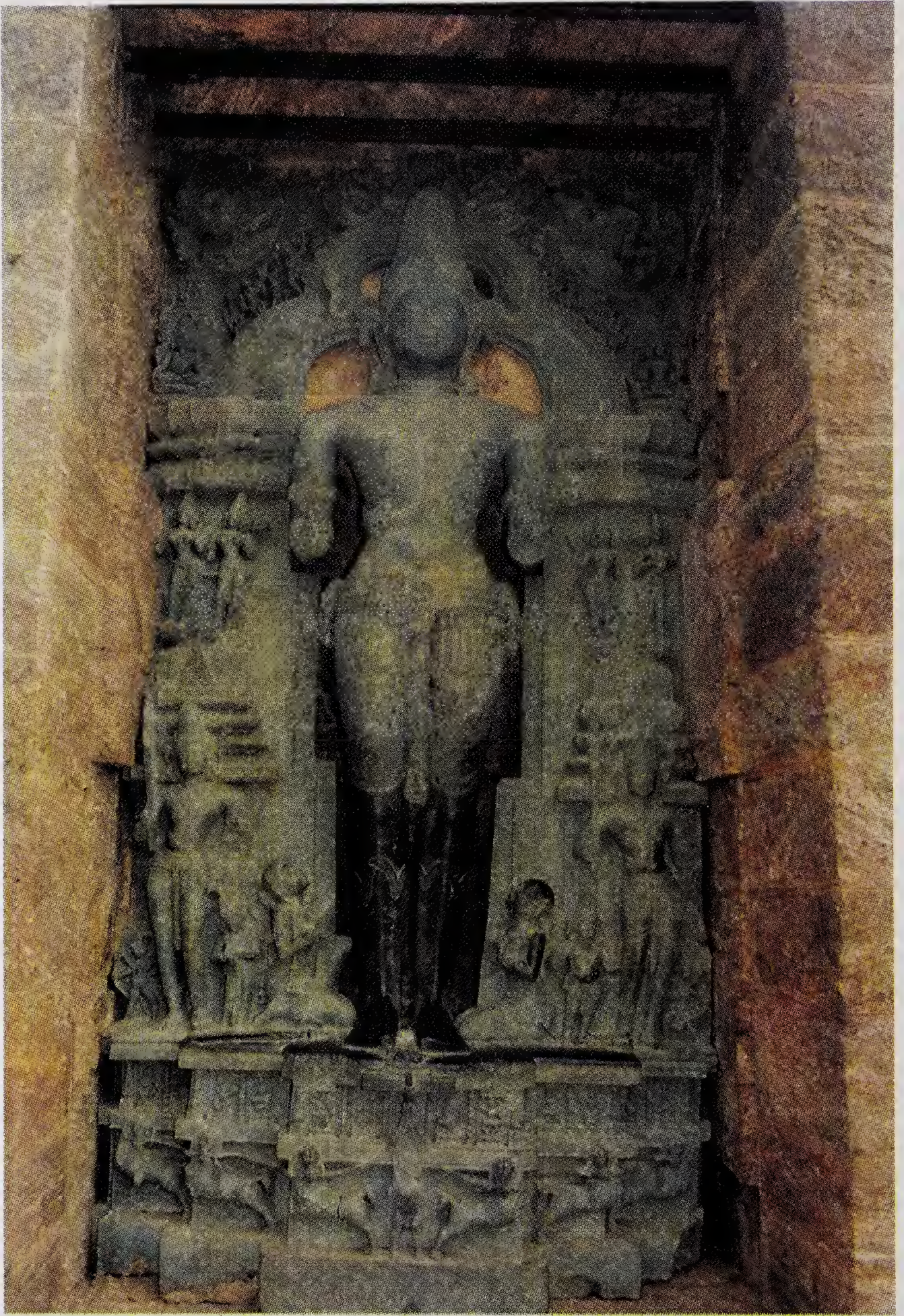
Giraffe scene in the platform





Deula: Surya in the raha niche, West





Deula : Surya in the raha niche, South





Deula: Sun god Bhaskara in the raha niche, North





Deula: King Narasimha worshipping Siva linga, Jagannath and Mahisamardini (Detached sculpure, Konark Museum)





Deula: Platform inside the sanctum view from the East.



Konark Temple in 1837 (James Fergusson)





Jagamohana, Female drummer, middle terrace.





Jagamohana, Female musician playing on large cymbals, bottom terrace.





Jagamohana, Marttanda Bhairava on the raha of bottom terrace.





Jagamohana, Female musician on the bottom terrace playing on small cymbals





Navagraha slab from east entrance : Ravi (Sun), Soma (moon), mang (Mars)



Navagraha slab, Budha (mercury), Brihaspati (Jupiter) Sukra (Venus)





Navagraha, Sani (saturn) Rahu (ascending node) and Ketu (descending node)



War Horse, in the courtyard on the south.





One of the elephants in the north.



Natamandira : Pair of Gaja Sinhas at the eastern entrance.





Natamandira, General view from the southeast



Natamandira, Platform wall details





Detached image of Surya, Konark Museum



under the command of Dandanayaka Anantapala, who erected a pillar of victory at Kanchi. A stone inscription of Narasimha Deva, issued in his eleventh regnal year, refers to donation of land in Chodadesa, Pandya desa and Kanchi desa, for providing offering to the eleven Rudras for the long life of the king. The Madala Panji, the chronicle of Puri claims that Langula Narasimha Deva, spent twelve years in the South and conquered upto Setubandha Ramesvara. An inscription from Draksarama dated 1262 A.D., mentions that Narasimha I was the master of the Godavari valley. An inscription from Simhachalam reveals that Vira tilaka Samata Chudamani Deo Sahasamalla was the governor of Southern provinces in 1251 during the reign of Narasimha-I.

In the north, the Muslim rulers of Bengal constituted a major threat to the Ganga empire. His predecessor Anangabhim III had already taken steps to protect the Ganga empire. A statesman with foresight, Narasimha-I wanted to put an end to the Muslim menace by an aggressive policy. In 1243 A.D. the Orissan soldiers took offensive, commenced molesting the Laksmanavati territory and in the battle that took place at Katasin, quite a large number of Muslims were slain. Malik Izzudin Tughril-Tughan Khan, the ruler of Bengal had to retreat to his capital without any success. In 1245 A.D. Narasimha-I's army marched again and advanced upto Lakhmanavati. The commander of the Orissan forces was a person called Sabantor (Samantaraya) who was the Son-in-law of the Rae. The Tabaquat-I-Nasiri, admits that having shown the greatest audacity he had driven the Muslim forces as far as the gate of the city of Lakhmanavati. The capital of Tughrie-I-Tughan Khan was blockaded and he had to seek support from Delhi and Oudh. But before the arrival of reinforcement, the Orissan army had left Bengal at the approach of the monsoon. Ikhtiya-ud-din Yuzbak was appointed the governor of Bengal and he wanted to avenge the defeat. General Samantaraya, the son-in-law of the Rae of Jajnapur, was able to defeat him and "a white elephant more than which there was no other valuable in that part and which was ruttish, got out of his hands in the field of battle, and fell into the hands of infidels of Jajnapur". After the death of



Yuzbak in 1257, no other Muslim governor could dare to defeat Orissa. The war with Bengal was so significant that the Ganga copper plate inscriptions of Narasimha's successors state. "The white river Ganga blackened for a great distance by the collyrium washed away by the tears from the eyes of the weeping Yavanis of Rarha and Varendra and rendered waveless, as if by this astonishing achievement, was now transformed by that monarch (*Narasimha-I*) into the black-watered Yamuna". An inscription records the arrangements made in a monastery at Bhubaneswar for resettlement of Sannyasis of Radha and Gauda after Muslim conquest of the area. It appears that during the chaotic period of hostility with Bengal, Southern parts of West Bengal, i.e. Hoogly, Howrah and Midnapore passed into the hands of Narasimha. K.C. Panigrahi observes, "His victory over the Muslims of Bengal and his acquisition of the Southern districts of West Bengal must have enormously raised his prestige in the eyes of contemporary Hindu rulers, and augmented his resources which in all likelihood enabled him to undertake the construction of a stupendous structure like the temple of Konark, designed to exhibit his power, prestige, opulence, devotion and perhaps to commemorate his victory also".

The Western frontier of the Ganga empire was secure as a result of matrimonial alliance with Haihayas. The Anantavasudeva temple inscription mentions that the Haihaya hero Paramardi Deva, the brother-in-law of Narasimha, laid down his life in subjugating the enemies. Thus during his reign Orissa reached the zenith of power. Orissa was an independent kingdom, successfully resisting all attacks whether from North or the South, and it is the pride of victory that the sculptures of Konark reflect in an impressive manner. Narasimha was not only a great warrior but also a great patron of art and literature. He was, without doubt one of greatest kings of his age. It is possible, as M.M. Chakravarti suggests, the famous Sanskrit work *Ekavali* was composed by Vidyadhara during the reign of Narasimha-I. Narasimha-I was famous for his charitable activities and it is known from inscription that he performed *tulapurusa Mahadana* ceremony which involved donation of gold equal to the weight of his body. 'He even made



over money to Brahmanas in pious gifts. Seeing his boundless charity, it was believed, as if Narasimha Vishnu himself had been born in the world'. Narasimha-I was a devotee of Surya. In the sacred Simhasana of the temple, a sculptured frieze depicts him as receiving the garland of the Sun god. In the Parsvadevata images king Narasimha is shown kneeling at the feet of the Sun god. In inscription, the king is styled as a devotee of Siva (Parama mahesvara), son of Durga (Durgaputra) and son of Purusottam (Purusottama putra). In the sculptures of the Surya deula, King Narasimha I, is depicted as honouring Mahisamardini, Purusottama-Jagannatha and Siva Linga. Thus he worshipped the three divinities in addition to the Sun god. Narasimha-I was a man with versatile personality. In Konark sculpture he is shown on a swing, discussing with scholars, depicted as an archer, reading a copper plate grant in front of his ministers, preparing to set out on a journey, etc. His name entered into the collective race memory and he became famous as 'Langula Narasimha Deva' i.e. Narasimha Deva who possessed a tail. This expression, used in the *Madala Panji*, and other literary texts, like the expression 'Langula chumbita tanu' of the *Bhaktibhagavata* composed in 1510 AD by Jivadevacarys is enigmatic. In inscription the king is compared to Narasimha incarnation of Vishnu. It is possible that in popular mind the king was compared to an angry lion with a raised tail. The *Gangavamsanu charita*, a Sanskrit text of the 18<sup>th</sup> century, which purports to give an account of Ganga Kings, mentions that 'though king Narasimha looked handsome, a veritable tail emerges when he became angry'. It has been suggested that the expression 'langula' or tail denoted some peculiarity in his costume or some sort of sectarian mark resembling the drawing of a tail. The view is however not corroborated by the figure of the king depicted in Konark sculptures. The suggestion that he had a protuberance of the spinal cord or some sort of physical deformity cannot be accepted in view of his energetic career. The *Vamsavali Pothis*, consulted by Andrew Stirling in 1825, records the tradition that this "prince was renowned for his strength and skill in all athletic exercises.



He could break a block of stone with a blow of his fist'. The *Bhaktibhagavata* uses the term *Jagadekamalla*", or a great writer which also shows that king Narasimha-I was a healthy person.

Narasimha-I was only second to king Chodaganga Deva in building temples. Tradition relates that he constructed the temple of Gopinatha at Remuna in Balasore district. He built the Siva temple of Kapilas and an inscription engraved on *kalasa* reveals that king Narasimha paid a visit to Sikharesvar Siva temple in April 1246 A.D. The inscription from Simachalam states that the king ordered his general Akatayi, to build the vimana, mukhamandapa and natyamandapa of the Varaha Narasimha temple at Simhachalam. The most ambitious undertaking and by far the first major attempt to construct a colossal Sun temple in India, was the erection of the Konark temple by King Narasimha-I. It was his greatest achievement as a builder and, indeed, the crowning glory of his career.

Konark was considered to be the most appropriate place for construction of a Sun temple because from time immemorial it had a special importance as a served centre of Sun worship. Kalinga is considered as the birth place of Surya and of the four traditional ksetras of Orissa, Bhubaneswar, Puri, Jajpur and Konark, the last one was alone associated with the worship of the Sungod. The sanctity of Konark, might have been the main consideration for erecting a temple there. It was erected very near the seashore. In honour of the rising Sun of the sacred places of Orissa, Bhubaneswar, Puri and probably Jajpur already had grand temples and therefore Konark was the obvious choice for building a stupendous temple which Fergusson pronounced 'as the most beautiful in the province'.

On the basis of literary and epigraphic evidence it is fairly certain that King Narasimha-I has constructed the Surya (temple) at Konark. In Lingaraja temple and Jagannanatha temple their builders have not given any inscription. Following that tradition Narasimha has not placed any commemorative inscription on the temple of Konark. In his own inscription no reference is made to



the construction of the temple. In the copper plate inscription of Narasimha-II, dated akayear 1217 (1295), this remarkable achievement of Narasimha is specifically mentioned in the form of verse which is repeated in the charters of the subsequent Ganga rulers. The varse is as follows

‘sthatum surai=saha mahat=Kalayari Konakone  
kutirakam=achikarad usnaravsmeh’.

‘King Narasimha built at Konakona a place of great renown, a temple of the Sun to live in with other gods.

Although Narasimha had built a colossal temple, it has been mentioned as a *Kutirakam* or hut out of humility.

In the *Oriya Madala Panji*, as well as in the *Katakarajavamasavali* a Sanskrit text of the same nature, Narasimha Deva is mentioned as the builder of Konark temple. In the 16<sup>th</sup> century, Abul-Fazl, the court historian of Akbar was aware of the tradition that ‘Raja Narsing Deo completed this stupendous fabric and left this mighty memorial to posterity’. In the 18<sup>th</sup> century, the Sanskrit work *Ganga Vamsanucharita* mentions this achievement of Narasimha. In 1825, even before the discovery of Ganga inscriptions, Andrew Stirling ascribed the temple to ‘Raja Langora Narsimha Deo, A.D. 1241, under the superintendence of his minister Shibai Santra’. Thus over the centuries, atleast from 1295 A.D. to the present times, King Narasimha is remembered as the builder of Konark temple.

The temple of Konark was built during the reign of Narasimha-I (1238-1264 A.D.) but no exact date is available either for its beginning or for its completion. The Ganga inscriptions, so far discovered, do not throw any light on the date of construction. A Sanskrit verse of uncertain origin found in the *Madala Panji* and its Sanskrit version *Katakaraja Vamsavali*, states that the Konark temple was built in saka 1200 i.e. in 1278 A.D. The verse is as follows:

Sapucha Narasimhena ksmesva ansumalinah  
*prasada karito rajno saka dvadasake sate*

Narasimha, who possessed a tail built a temple in honour of



the Sun god in 1200 Saka era i.e. in A.D. 1278. This date is hardly acceptable because the date given does not fall within the reign of Narasimha-I. Moreover, such traditional verses with regard to the Lingaraja and Jagannatha temples have proved to be wrong. According to the *Madala Panji*, the temple was begun in the 2<sup>nd</sup> Anka year of the king, while according to another version of the Panji, it began in the 3<sup>rd</sup> Anka and the temple was consecrated in the 22 anka. There is however, no corroborative evidence to support such views. In general, the pre Suryavamsi history, recorded in the *Madala Panji* is misleading. An Oriya manuscript entitled *Baya chakada*, provides interesting details about building operations and records the daily expenditure incurred in the construction of the Konark temple. This evidence, however, has been set aside until a systematic study of the original text is undertaken to establish its historical value and remove doubts and controversies.

It is likely that construction of Konark temple was undertaken after his victory over Muslim rulers of Bengal in 1245 A.D. The battles of Narasimha are vividly depicted in the stone. Referring to the war horse on the South, K.C. Panigrahi observes, "The dismounted rider is no other than Narasimha-I, the bearded figure is most likely Izzuddin Tughral Tughan Khan, governor of Bengal, or any of his general defeated by Narasimha in the battle field". Whether it is correct or not, the sculptures amply illustrate the martial ardour of Orissa and such war scenes seem to have been carved after the wars with Bengal. The King's visit to Siva temple at Kapilas in 1246 A.D. seems to suggest that temple building activities have already started by that date. Abul Fazl states that the whole revenue of Orissa for twelve years was spent in erecting this temple. Most likely, after construction of Konark, Narasimha I ordered his general to construct the Varaha Narasimha temple at Simhachalam which bears an inscription of 1268 A.D.

Over the centuries, myths, legends and traditions have developed around Konark and have added to its mystery. Perhaps no other temple in India remained as mysterious as Konark in some important matters, such as construction, nature of worship



and the reason of its fall. Some of these legends, irrespective of their historicity, have become integral part of the annals of the temple. In the legend of the *Samba Purana*, Samba, the son of Krishna, is connected with the erection of a Sun temple on the bank of the Chadrabhaga river. The site was obviously Multan in Punjab. In later times, however, the legend came to be associated with Konark and a small stream in its vicinity came to be known as the Chandrabhaga.

According to legends mentioned in the *Madala Panji*, Sivai Santra was the superintendent in charge of construction of the temple. The initial work involved the filling of the river with stone blocks. But as the stones were thrown into the centre, these were carried away and the work got delayed. One day while Sivai Santra, was offered hot *Khiri* (gruel) by an old woman, he started to take it from the middle of the dish as a result of which his hand received burns. The old woman, not recognising him to be Sivai Santra, told him, 'You are behaving like Sivai Santra. He is throwing stones into the centre of water. Instead, he should start from the edges to build the temple'. After hearing this, Sivai Santra realised his folly, corrected his mistake and succeeded in building the temple called *Padma Kesara* and the *Mukhasala*. A similar legend is associated with Chandragupta Maurya when he tried to attack the Nanda empire from the centre without guarding the rear. He realised the mistake while eating from the centre of a hot plate. The legend is mentioned in Jaina work *Parisistaparvan* in the context of early career of Chandragupta Maurya. Such floating legends some how, got associated with the Konark temple in a later period. It seems that legends originated when local people failed to give a proper explanation regarding construction of the stupendous temple.

Another legend associated with a twelve year old boy fixing the kalasa of the temple, is quite popular in Orissa. For sixteen years twelve hundred carpenters and masons worked in building the sun temple of Konark. Visu Maharana, the master craftsman had left his expectant wife who gave birth to a son after his



departure. The boy wanted to know and being told that his father was building the temple at Konark, he set out on a journey to that place. As a sign by which the young man might know his father, his mother gave him the fruit of *barakoli* tree that grew in their courtyard, telling him that only his father could identify it. After a long wandering he came at last to the temple, where he showed the fruit and found his father, who alone could name the place from which it had come.

However, the union of father and son could not last long. Dharmapada soon learnt from his father about the decree issued by the King which stated that heads of all 1200 craftsmen would be cut if they failed to complete the porch upto the Kalasa or final vase within the stipulated time. Dharmapada, hearing this climbed up the temple the same night, and utilizing all his craftsmanship finally completed the porch up to the final vase.

The next morning the artisans saw with surprise this astounding feat and learnt that the work had been done by no other than Dharmapada the son of Vishu Maharana. Then they asked Vishu Maharana if he preferred his son to all his fellow workmen, for they said, if your son is allowed to take all the credit of completing the porch upto the final vase, we will lose not only our daily bread but also our lives, for the king will think we have been neglecting the work. Vishu Maharana then sorrowfully declared his preference for his fellow workmen. When Dharmapada learnt this he climbed to the top of the Sikhara and then jumped into the space and thereby gave his life in order to protect the life and honour of the 1200 artisans working under his father.

The legend has been embellished with admixture of new elements by different writers. In one version, the master craftsman is called Visu Maharana, while Gopabandhu Das, a Nationalist leader of Orissa, for the first time coined the name Dharmapada for the boy as his father was involved in the construction of the temple of the Dharma Devata or the Sun god. A similar legend is also associated with the Varaha Narasimha temple at Simhachalam.



According to tradition, a loadstone was placed on the top of the temple. In 1825, Andrew Stirling mentioned, "The natives of the neighbouring villages have a strange fable to account for its desertion. They relate that Kumbha Pathar or loadstone, of immense size, was formerly lodged on the summit of the great temple, which had the effect of drawing ashore all vessels passing over the coast. The inconvenience of this was so much felt, that about two centuries since, in the Mugal time, the crew of a ship landed at a distance and stealing down the coast, attacked the temple, scaled the tower, and carried off the loadstone. A different version of the legend says that the image of the Sungod was hanging in the air by means of magnet. At Kazwini while referring to attack of Somnath by Sultan Mahamud is 1026 A.D. records that the idol of Somnath was in the middle of the temple without any thing to support it from below, or to suspend it from above. When the king asked his colleagues what they had to say about the marvel of the idol, and of its staying in the air without proper support, several maintained that it was upheld by some hidden support. The king directed a person to go and feel all around and above and below it, with a spear, which he did but met with no obstacle. One of the attendants then stated his opinion that the canopy was made of loadstone and the idol of iron and that the ingenious builder had skillfully contrived that the magnet should not exercise a greater force on any one side, hence the idol was suspended in the middle.

Mahmud Bin Amir Wali from Balkh, who visited the temple in 1626 records that "at the top of the building there is a single piece of loadstone approximately 100 maunds in weight. And from the Europeans I have repeatedly heard that in this neighbourhood there has not been spotted any mountain in which magnetic stone is to be found except in Cathay". In 1628 A.D. when measurement of the empty temple was taken, the Kalasa and lotus finial of the temple had been broken but *chumbaka luha dharana*, magnetic iron rod, was still existing. It appears that the story of the loadstone gained currency when people failed to understand the device to hold the Kalasa in position. Mahmud bin



Amir Wali wrote his travelogue *Bahr-al-Asrar*, with the express purpose to describe the wonders of the world and hence, among others, he included this wonder of Konark temple. The existence of the loadstone seems to be contradicted by the use of iron beams in the construction of the temple. The discovery of the sacred Simhasana and pedestal for the presiding deity contradicts the tradition that the idol was suspended in the middle. In the absence of electro-magnetic device, the story that the image of the Sun god was hanging in the air by means of loadstone cannot be accepted. The drawing ashore of ships by the magnetic properties of the Kumbha Pathor seems to be improbable. The sailing directories refer to this temple as a landmark for sailors, but such a phenomenon is never recorded. Perhaps it is not necessary to dissect such legends, with methodology of history. The enigmas of this great temple being incomprehensible, it is natural that legends grew around it and perhaps it is not necessary to expunge these from the pages of history, as these have already become a part of our intangible heritage.

Several interpretations have been advanced as to why the king thought of constructing the Sun temple. He was not exclusively devoted to the Sun god. The earlier Gangas were Saivas, but from the time of Ananta Varman Chodaganga, the builder of Jagannatha temple, they became Vaisnavas. Anangabhimadeva III, proclaimed that he was the Deputy of Purussottama Jagannatha but the Gangas continued to respect Siva. Narasimha-I followed this tradition. The deep devotional motive, in the construction of the Sun temple, cannot be doubted. In several sculptured panels, he is shown as worshipping the Sun god.

It is believed that the king suffered from leprosy or some sort of physical deformity and being cured by the grace of the Sun god, he built the temple. The *Samba Purnaa* shows how, Samba, son of Krisna, was cured of leprosy by the grace of Sun god. The *Bhavisya Purana* also refers to the power of the Sun god to cure leprosy. The notion was widely prevalent in the ancient world, but there is nothing to suggest that Narasimha I, the builder of the temple, was ever afflicted by leprosy. His hunting expeditions



and his battles, depicted on the temple walls, suggest that he was a healthy person.

It is said, on the basis of Chinese chronicles, that in tenth-eleventh centuries there was abnormal increase in sunspots, causing widespread occurrence of the skin disease for which Sun god, the healer of skin diseases, was worshipped. The total eclipse of the Sun on September 26, 1242 is cited as motive force for erecting a Sun temple. It may be mentioned that total solar eclipse, which occurred on February 16, 1980, created panic among the people and life came to a stand still. In Indian mythology Rahu and Ketu, eat up the Sun for which eclipse occurs. People take bath and give donations, after eclipse as atmosphere gets polluted during eclipse. It is interesting that the verse which refers to the construction of Konark temple is preceded by reference to the charity of Naraisimha-I.

“Shining day and night, and making meru over to the Brahmanas in pious gift, King Narasimha built at Konakona temple of the Sun’.

In the Indian traditions, from the Vedic period, it was believed that one could get a son by propitiating Surya and history offers examples like king Prabhakara Vardhan (7<sup>th</sup> century), who is said to have prayed to the Sun god at dawn, at mid day and at evening for offspring’. The Pratihars king Ramabhadra (9<sup>th</sup> century) obtained a son by performing mysterious rites in honour of the Sun god. His son was named Mihira Bhoja and Mihira is a well known name of Surya. Narasimha I named his son as Bhanu (another name of Surya), the first solar name in the dynasty. Therefore, some scholars believe, and it may be probable, that the king built the temple out of gratitude when he was blessed with a son by the grace of Surya. This, however, has not been confirmed by contemporary sources relating to Narasimha-I. The building of a temple is usually considered as a pious act assuring the builder a place in heaven. The Ganga inscription dating to the time of Narasimha II (1295 A.D.) mentions that ‘the king Narasimha I built at Konakona, a place of great renown, a temple of the Sun to live in with the other gods’. A similar notion is



reflected in an inscription which mentions that during the time of Mihirakhula a Sun temple was built on a mountain called Gopa (Gwalior). The inscription records that “Those who cause to be built an excellent house of the Sun, like in luster to the rays of the moon- their abode is in heaven, until the destruction of all things”. The Samba purana (32.59 b-60) also contains the same belief. It is evident that the king built the Sun temple in order to live in heaven with other gods as a result of this pious act. It seems that the primary inspiration came from his devotion to the Sun god, as a result of the fulfillment of a cherished desire. Besides the devotional motive, he possibly wanted to promote the prestige of his kingdom by erecting a great temple to surpass the grand Jagannatha temple of Puri.



# THE ORISSAN STYLE OF TEMPLE ARCHITECTURE

The temple of Konark represents the best in Orissan architectures; it is the culmination and climax of a long evolution of Orissan temples. Hence to understand this temple one has to know the various features of the Orissan style of architecture, its long evolution and the architectural lore of Orissa. The monument has to be understood as the craftsmen understood it in the past.

**Orissa is a beautiful land of temples.** A survey of extant temples reveals that there was brisk architectural activity from about the 6<sup>th</sup> – 7<sup>th</sup> centuries A.D. By the 11<sup>th</sup> century A.D., with the Lingaraja Temple, the Orissan temple style became complete and established its distinct features which were to shape the pattern for later temple-building activities. The style reached its climax about the middle of the thirteenth century A.D. In course of its evolution, it developed certain individual features of its own. Because of these distinctive features, Orissan temples form a class by themselves, and the many manifestations of this school of temple architecture in Orissa can conveniently be labelled as ‘Kalinga style’. Though the style was confined to the present Orissa, its influence was felt in West Bengal and Andhra Pradesh; some of the art-motifs even migrated beyond India to Java in Indonesia. An inscription in the mukhamandapa of Amrtesvara temple at Holal (Bellary district Karnatak) mentions the Kalinga type along with the *Nagar*, *Dravida* and *Vesara* styles. This shows that even in the pre-Muslim period, the predominant temple style of Orissa came to be recognized as a distinct one.

## **Main features of an Orissan Temple**

The typical Orissan temple consists of the sanctum and the porch- the two forming component parts of one architectural



scheme. The main temple or the Vimana (also called deula) is of the rekha order and has a curvilinear superstructure. The frontal porch or the jagamohana (also called mukhamandapa, mukhasala, bhadradeula, etc) meant for sheltering the devotees, is a pidha deula, possessing a pyramidal superstructure. In the earlier phase of the style there was no pidha deula and the jagamohana was distinguished by a flat roof, but in course of time, this was changed into a pyramidal one. The pidhas are arranged in a continuous succession or in tiers. In local terminology the tier is called the potala and the intervening vertical space between the potalas is known as kanti. The pidhas diminish in size as they rise and generally the uppermost pidha is half the size of the lowest one. Standing side by side, the vimana with a curvilinear sikhara and the jagamohana with a pyramidal superstructure offer a pleasing contrast. The vertical ascent of the curvilinear tower of the sanctum contrasts with the horizontal emphasis of the jagamohana. In the Orissan style of temple architecture, however, the two together make the temple a complete whole. The two structures are linked internally. Externally the jagamohana is subordinate to the main temple (bada deula) in height.

The two contrasting structures, deula with a curvilinear sculpture and jagamohana with a pyramidal structure and subordinate to the former is quite peculiar to Orissa. This is evidently different from other regional, manifestations of the Nagara style, where the superstructure of the mandapas largely defer the soaring quilt of the spire over the sanctum.

There is a traditional belief among the craftsmen of Orissa that the main temple is the bridegroom and the jagamohana is the bride. In course of time, to meet the growing needs of the rituals, two more structures, the *natamandira* and *bhogamandapa*, were added. Each is a separate structure but integrated to form an effective and harmonious architectural organization. Standing in a row in the same axial alignment, with rising and falling peaks they give the impression of a mountain range and take the eye to the sikhara of the sanctum which is the highest of all. Often the temple complex is enclosed by walls, but there is no gopuram as



in the case of south Indian temples. The Orissan temple is remarkable in its plan and elevation. The interior ground plan of the temple is square as a rule but externally, because of projections, the temple appears to show a cruciform plan. Rarely the temple has a starshaped layout (tantrik temples at Baudh) or a circular plan to suit the rituals (Chausat yogini temples at Hirapur and Ranipurjharial). The Orissan temples are distinguished by vertical projections called rathakas or pagas.

Depending on the number of pagas, the temples are classified into tri-ratha, pancha-ratha, sapta-ratha and nava-ratha. The earlier temples are characterized by a tri-ratha plan, but in course of evolution the tri-ratha gave place to the pancha-ratha, sapta-ratha etc. In later temples the projections are well-developed and produce a charming effect through the play of light and shade.

In elevation the Orissan temples show interesting features. We have already pointed out that the vimana is characterized by a curvilinear and the jagamohana by a pyramidal superstructure. Both structures can be divided into four parts along the vertical plane. The four divisions are pitha, bada, gandi and shira or mastaka. From bottom to the finial each part of the temple has a special name. The Orissan craftsmen considered the temple as the body of the Cosmic Being. Therefore the different parts of the temple are named after limbs of the body. Just as the different parts of a human body are organically related to each other, so the different divisions of the temple bear vital relationship with each other and are integrated into an artistic composition.

The pitha or platform is not a compulsory feature. However, this is generally found in temples erected in the Ganga epoch.

The constituent elements of the bada are pabhaga, jangha and baranda. This type of trianga bada is found in temples belonging to the earlier phase of the style. In later temples the bada is composed of five elements, pabhaga, tala jangha, bandhana, upara jangha and baranda. The bada is thus of the panchanga type, the jangha being divided into two registers, known as lower jangha and upper jhangha by a set of mouldings called bandhana.



The pabhaga (foot part) denotes the bottom part of the wall and is composed of mouldings called khura, kumbha, pata, kani and basanta. The baranda forming the topmost part of the bada is composed of a series of seven or ten mouldings.

There is no difference between the deula and the jagamohana in the treatment of the bada, but they differ in the disposition of the gandi. The gandi of the jagamohana is of pyramidal shape, whereas the gandi of the deula has a curvilinear outline. The towering superstructure also underwent modifications in the course of evolution. The simple and squattish sikhara of the earlier epoch assumed a soaring quilt in the most representative specimens of the full fledged Orissan style. The shape of the sikhara with a curvilinear outline became architecturally satisfying. Sometimes the gandi is decorated with anga-sikharas which add to the grandeur of the sikhara and convey an impression of great height. The kanika-paga of the gandi shows several bhumis (levels) and has bhumi-amlas. The central raha is relieved with a prominent chityawindow design. In temples belonging to the developed phase, the raha has a lion motif which projects into the air. The earlier series of temples are distinguished by a gradual curvature of the sikhara but in the case of the later series, the sikhara is characterised by pronounced curve near the top.

The mastaka of the deula consists of the beki, the amla, the khapuri, the kalasa and the ayudha. The beki separates the square gandi from the circular crowning elements. The amla in the case of later temples is supported by dopichha lions at the corners and figures of vimanapalas placed on the centre of the raha. The auspicious kalasaa was sometimes made of gold. From the ayudha it can be ascertained to which divinity the temple is dedicated. A Visnu temple is crowned by a chakra, a Siva temple either a Trisula or a Linga. The Sun temple has a lotus finial. The dhvaja or banner is placed at the pinnacle of the temple.

The mastaka of the jagamohana consists of elements such as beki, ghanta, (bell-shaped member) above which there is another beki, amla, khapuri, kalasa and ayudha.



As regards orientation there is no fixed rule. Generally the temples face the East but temples facing West, North and South are not unusual in Orissa.

The sanctum has only one door and is not lighted by windows. In the earlier phase of the style, the jagamohana is provided with latticed windows at the sides in addition to the main entrance. In later examples generally there are non-functional balustraded windows. At Jagannath temple, Puri and the Konark temple, the jagamohana is provided with three entrance doors.

In Orissan temples there is no inner ambulatory around the sanctum. The sandhara configuration is totally absent in the Orissan style.

### **Sculptural Features**

The interior walls of the temple are generally plain but the exterior is fully decorated. Often the jagamohana has sculpture in the interior, but not the garbhagriha or sanctuary. The worshipper enters the temple leaving the ornamented exterior. After crossing the jagamohana he sees the images of Ganga and Yamuna at the bottom of the doorjambs of the sanctum and thereby gets purified. Then he enters the garbhagriha, and prays the god in a solemn atmosphere. The chief icon becomes the object of his concentration. The plain interior, when contrasted with the ornamented exterior of the temple, appears to have a symbolic significance. As Coomaraswamy observes, 'Life is a veil behind or within which is god. The outside of the temple is an image of this life, *samasara* and the carvings on it represent everything that belongs to Samasara and perpetuated illusion, every bond and each desire of loveliness that binds men to the wheel of life and death. Within, in an empty chamber the image of god is alone, lit up by tiny lamps seen from very far away by the approaching worshipper. This symbolism of phenomenal life as an embroidered veil beyond which the devotee must pass to find his god has perhaps always and every where been present, whether consciously or not, in the mind of Indian Cathedral builders'.

The Orissan temples are remarkable for the abundance of



sculpture. There are so much of sculptures that very aptly Stella Kramrisch has remarked, 'Architecture in Orissa is but sculpture on a gigantic scale'. The sculptural repertory consists of human figures including kanyas and erotic figures; cult icons, animal figures including mythical and composite figures; kirttimukhas, nagas and nagis, decorative designs like scrolls; architectural motifs like pidha, and khakhara and vajra mundis, chaitya-windows, etc. The abundance of sculpture, however, in no way overshadows the architectural greatness and beauty. The sculptures have a vital relationship with the temple surface. When they get detached from the temple, they lose much of their grace and animation.

The door-frames of the temples are ornate. The door frame of the Konark temple is elegantly decorated being divided into seven bands or Sakhas. In Orissan temples, at the bottom of the doorjambs, generally there are figures of *dvarapalas*, Ganga and Yamuna. In the centre of the door lintel usually the figure of Gaja-Lakshmi and rarely Lakulisa is depicted. The architrave above the lintel is carved with figures of planets; in case of earlier temples their number is eight, but in later temples all the nine grahas are depicted. The Orissan temples depict the *dikpalas* on their walls. From earlier temples nothing definite is known about the presence of *dikpalas*, but in temples belonging to the mature phase of the style, the eight *dikpalas* are carved in their respective directions. During the Ganga period, it also became customary to depict the consorts of the *dikpalas*. Another feature of the temples is that the principal niches of the main temple carry images of *parsvadevatas*, who are closely related to the presiding divinity. In a Saiva temple, the *parsvadevatas* are Ganesa, Karttikeya and Parvati. In place of Parvati, occasionally the image of Mahisamardini is found. In Visnu temple, Varaha, Narashimha and Trivikrama are installed as *parsvadevatas*. In a Sun temple different forms of the Sun-god and in a sakta temple images related to the pantheon are placed.

### Techniques of Construction

The building of a temple requires the cooperation of several classes of persons (like the sthapaka, sthapati, sutragrahin, taksaka



and vardhakin, the architect-priest, the designing architect, surveyor, sculptor and builder-plaster-painter) and involves several processes like quarrying of stones, collection of other building materials, selection of the site, laying the foundation, building it according to the plan, raising stone blocks, embellishing the exterior walls with fine carvings, etc. In the construction of temples, Silpasastra texts are followed. The local Slipa Sastra texts mention three types of structures, rekha, pidha and khakara. The khakhra temple, used for Devi worship, is characterized by oblong bada and semi-cylindrical roof.

The Orissan temples are mostly built of stones. From the early phase of temple building activities, stone is used to ensure the permanence of the structures. The stones, used in the temples, can be broadly divided into three rock-types, laterite, khondalite and chlorite. Laterite is employed for laying down the foundation of temples and mostly for building the enclosure walls. The limited use of this stone is because it does not admit of any fine carving. The ultra-basic rocks, commonly known as chlorite, have been used for making the *simhasana* cult-icons and occasionally for the door frames of the temples. The ultra-basic rocks combine hardness with easy workability and admit of very fine workmanship. The principal building stones are the khondalite. The schistose structure, together with the presence of soft graphite and felspar make khondalite an easily workable stone.

Besides the stone temples, brick temples were also built in different parts of Orissa. A number of brick temples are seen in the lower Prachi valley. When the temple is built of stones, these are quarried in places of their availability and carried to the temple site. In the case of long distance, the stones are transported by rafts along the rivers. Besides the water ways the stones should have also been carried along the land-routes.

The exact manner in which the construction of the temple proceeded and the heavy stone blocks were raised to great heights are yet to be established with certainty. It is believed that the temple was buried with either sand or earth during the process of construction. After the completion of the temple the sand was removed from the



interior. In course of the construction of a temple, on one side an inclined plane was made of earth or sand, through which the stones were dragged to the required heights. This supposition of a slope for hoisting of heavy stones is, of course, not without its disadvantages. M.M. Ganguly aptly point out: 'even if we admit the possibility of an inclined plane, the question may still be asked as to how they could manipulate such huge blocks at all. There is another difficulty in the assumption of the inclined plane: as the structure increases in height the line of the slope changes, and hence this contrivance of the inclined plane is to be adjusted at every step of progress by changing the base and the height of the plane, and the difficulty is all the more aggravated if the plane be made of heaps of sand'. A sculptured panel inserted into the wall of the Siddha Mahavira temple at Puri, throws interesting light on the subject. The sculpture depicts a temple under the process of construction, where two masons are still working on the top of the unfinished gandi while four other workers are carrying up a rectangular block of stone over an inclined plane. The presence of three pillars to support the inclined plane, whose one end rests on the ground and the other end on the top of the temple, suggests that the slops was made of wooden planks and not of earth or sand.

The walls of the temple rise straight up to a particular point, the stone slabs having been placed one upon the other. Then for reducing the internal space, to facilitate the spanning of roof, horizontal courses of stone project inwards. Thus the constructional technique is based on the corbelling. The craftsmen have not made use of any true arch, the arches are rather in the nature of sculpture than architecture. To impart stability to the walls built on corbelling system, they adopted the technique of tying the opposite walls by means of a number mudas or ceilings at regular intervals consonant with the height of the temple. These mudas are not seen from the outside. The device of mudas in the internal construction of the temple is a typical feature of the Orissan temples. Another significant feature about the construction is the astute plan of the sanctum; the garbha muda or the bottom ceiling rested over iron beams and no pillars have been built to provide additional support. In the case of bigger temples, however, the



jagamohana has four pillars.

The constructional method of the architects was simple. The masonry is of the dry order, mortar has not been used in the joints. The stones are held together mainly by as a system of counterpoise, the weight of one stone acting against the pressure of another, much of the stability being a matter of balance and equilibrium. The stones have been properly cut and their faces have been so finely dressed that when placed one upon the other, the joints are hardly noticed. At places iron dowels have been used to keep the stone slabs in position. In later temples as at Konark, the Orissan architects made use of iron beams. The iron beams have been used as supports under the false-roof and under the architraves, which are placed above the doorways. They vary in length to suit the purpose for which they were intended. The iron of these beams is pure wrought iron. The manufacture of the heavy iron beams reveals the smelting and forging abilities of the iron workers of those days.

The sculptures of the temple give us some indication about the mode of their carving. Some of the unfinished carvings, with only the bare outlines of the designs blocked out, as on the walls of the Mohini temple and the jagamohana of the Rajarani temple at Bhubaneswar, suggest that greater part of the sculptures were carved in situ, after the construction of the different parts of the temple was over. Before starting a sculpture, be it of a full figure or a simple design, the outlines are first indicated on the stone with a sharp instrument. After this preliminary was over, the work of carving proceeded according to the requirement. Some of the Orissan temple sculptures were lime washed, plastered or painted red, and traces of these are still visible. The sculptures of Parasuramesvara, Muktesvara, Lingaraja and of the Konark temples were lime-washed at different intervals of time. The brick red paint applied on the Muktesvara temple, Bhubaneswar, was prepared by the mixture of clay with local red ochre or hematite.



## Evolution of the Style

The Orissan temple style did not represent a fixed type. It has, over the centuries, evolved and altered with the time. In the course of its evolution, as the building tradition was handed down from one generation to another, some changes are obvious. But in spite of the stylistic change that distinguishes one phase from another, we find a remarkable continuity in the development of the style till it reaches the climax.

In general the evolution of the Orissan style can be divided into four phases viz, early, middle, phase of maturity and phase of ultimate climax.

Bhubaneswar, which itself is a city of temples, has important early temples such as Bharatesvar-Lakshmanesvar group, Parasuramesvar, Svarnajalesvar, etc. Most famous of these early temples is the Parasuramesvar temple, built in the 7<sup>th</sup> century. It is a modest temple consisting of deula and jagamohana; the former has a squattish type of curvilinear sikhara and the latter is designed as an oblong pillared hall with provision for clerestory skylights between the two sloping tiers of terraced roof. The temple walls are, however, covered with figures and decorative motifs in low relief which are noted for their simplicity and beauty. There are seated dikpalas, saptamatrikas, Ganesha, Lakulisa, Surya, eight-armed Nataraja and other divinities.

The style was developed further in design, techniques of construction and decoration. In Vaital temple at Bhubaneswar, for example, we find a jagamohana of the Parasuramesvara type, but built on cantilever principles. The main temple is of Khakhara order and enshrines an image of Chamunda. The sculptures are also much developed and show sensitive modelling. Early temples are also to be found in other parts of Orissa, at Gandharadi near Baud in Boudh district, at Simhnatha in the bed of the Mahanadi in Cuttack district, on the top of the Jagamanda hill in Koraput district, at Kualo in Angul district and at Badgaon in Ganjam district.

In the next phase, during 10<sup>th</sup> and 11<sup>th</sup> century, temple architecture progressed under the patronage of the Somavamsi



kings of Orissa. The sikhara of the main shrine came to possess a soaring quality, the jagamohana emerged as a well-formed pidha temple, and new developments were marked in the sphere of sculpture, technique of carving and iconography. For example the Mukteswar temple (10<sup>th</sup> century) has a standard type of rekha sikhara but of great beauty, light and rhythmic in its treatment. Its jagamohana has become a pidha deula with pidhas arranged in a continuous succession and crowned by a *kalasa*. With a beautiful makara torana at the entrance, and graceful carvings from top to bottom, the temple is 'the gem of Orissan architecture' or as R.L. Mitra has said, 'the handsomest—a charming epitome of the perfection of Orissan temple architecture'. The Raja-rani temple (11<sup>th</sup> century), originally dedicated to Siva but no longer under worship, represents yet another experiment in temple architecture. It has a jagamohana, though plain, like that of Muktesar, but the main temple, adorned with a number miniature temples, resembles the temples at Khajuraho. In other details, however, the Rajarani represents a continuation of the Orissan style and is a fine specimen of architecture, a dream realised in rajaraniya sandstone. The Brahmesvar temple, built by queen Kolavatidevi in the 11<sup>th</sup> century, marks the evolution of a full-fledged jagamohana with all components of the mastaka that set the pattern for later examples. The great temple of Lingaraja (11<sup>th</sup> century) at Bhubaneswar not only marks the climax of the Kalinga style, but undoubtedly it is also one of the splendid temples of India. It represents an elaborate temple complex consisting of deula, jagamohana, natamandira and bhogamandapa in one axial alignment and several lesser shrines all round. In contrast to the pyramidal form of the jagamohana, the soaring tower of the deula (45m. in height), with vertical succession of miniature temple motifs on it has a unique grandeur and majesty.

It represents an improvement over the Brahmesvar with its greater height and elegant curvature of the deula and arrangement of pidhas of jagamohana in two tiers.

The Ganga period (1114-1435), that followed the Somavamsi rule, was a glorious period of architectural activity. The grand



temple of Jagannath at Puri, planned on an elaborate scale like that of the Lingaraja, is a worthy monument in honour of the 'Lord of the universe'. It was constructed by Ganga monarch Anantavaraman Chodagngadeva when Orissa possessed an empire from the Ganga to the Gautamaganga or the Godavari. Built about the middle of the 12<sup>th</sup> century, its wonderful artistic carvings remained under successive coats of plaster, and earned for the monument the name 'white pagoda'. Now these are being revealed again in an ambitious undertaking by the Archaeological Survey of India to preserve this great national monument for the posterity in all its splendour. The 'Black Pagoda' or the celebrated Konark temple, built by Narasimha Deva (1238-1264) in the best days of political power and economic prosperity, is the greatest of Orissa's monuments. If art is an index of the creative geniuses of a people, this grand temple is not only the finest articulation of the creative genius of the Oriya people, but being a wonderful monument, it is a priceless heritage of all mankind.

Though no ambitious temple was erected after Konark, the architectural style was not confined to a single great temple nor did it decline suddenly. The Anatavasudeva temple at Bhubaneswar was built by Chandra Devi, sister of King Narasimha in 1278 A.D. There are other temples such as Yamesware temple at Bhubaneswar, Madhavamanda temple at Medheva, Gangesvari temple at Bayeivsvati, which in consideration of their architectural and sculptural features, may be assigned to the 13<sup>th</sup> century. After Konark however, in the absence of political stability and patronage the style gradually declined. The spirit of that art still lingers and temples were built on traditional style. Orissa is one of the few states in India which has living tradition of stone carving and architecture.



# THE MAIN TEMPLE – COMPLEX OF KONARK

The Sun temple of Konark, enclosed within a spacious compound, consists of the deula, the jagamohana and the natamandira, along the east-west axis. All the structures face the east. The deula and jagamohana forming component parts of one architectural scheme are designed in the form of a monumental chariot of the Sun god. The natamandira is located at a short distance from jagamohana on the east.

## **Platform**

The deula and the jagamohana stand on a magnificent pitha or platform. To give the impression of a chariot, twenty four wheels, twelve each of north and south, have been carved at intervals on the face of the platform. The chariot is pulled by seven horses, arranged on the eastern stairway of the jagamohana, four horses on the south and three in the north.

The platform rests on a low upana, the vertical faces of which are relieved with frieze of elephants, whose number is said to exceed 1600, military procession, men and animals carrying supplies, hunting scene, labourer at work, scenes depicting working of food, etc.

The platform is, about 4m. in height. The face of the platform has five horizontal divisions simulating the five-fold divisions of the bada of a contemporary Orissan temple. The lowest division, the pabhaga 0.9m high, consists of five richly carved mouldings at intervals connected by vertical bands of floral and scroll work. The lower jangha of the platform is decorated with khakhara mundis and decorative pilasters. The decorative figures include various motifs such as vidalas, alasa kanyas, Naga-Nagi figures etc. The bandhana, above the tala jangha, consists of three



mouldings. The vertical bands joining the mouldings have niches with male and female figures, standing over flame of fire, soldiers, erotic scenes, etc. The upper jangha contains mostly pancharatha pilasters, instead of mundi designs, and these pilasters are aligned with the khakhara mundis of the lower jangha. The pilasters of the upper jangha depict mithuna figures, female figures in various poses, a royal person killing boar, a soldier in the company of his wife and child, a woman attacked by monkeys, etc. The group compositions in the broad panels, among others, include Narasimha-I worshipping Sivalinga, Jagannatha, Mahisamardini, a king practicing archery, a king on elephant being presented with a giraffe by a group of men, a king about to undertake a journey, a queen in the company of her attendants, and assembly of men inside a pillared pavilion. The disposition of the janghas into two unequal parts and absence of any established convention, provided ample scope to the artists to decorate the platform with a wide variety of scenes and motifs against the honeycombed jail work. The baranda, above the upper jangha, consists of three mouldings separated by a recess with their moulding depicting frieze of elephants, war scenes, rows of geese, etc. The baranda mouldings have disappeared at many places.

### **The deula**

The main temple or the deula, which originally enshrined the presiding deity, stands on a common pitha, 0.6m high, consisting of two ornate mouldings. Its soaring superstructure has disappeared and only a portion of its bada remains upto the Parsvadevatas with modern restorations. The bada of the deula is approximately 20m square, measuring 10m square in the interior. The thickness of the walls at the bottom is about 5.2m. The bada is pancharatha on plan and has five divisions such as pabhaga, lower jangha, bandhana, upper jangha and barandas, each division is quite large and monumental in scale. The pabhaga consists of five usual mouldings – khura, kumbha, pata, kani and basanta. The central facets of the khura contains pillard pavilions having in their niches scenes related to the life of the king. The jangha is divided into two by a bandhana of five mouldings. The facets of



the lower jangha are richly carved with scroll work and floral designs. The centre facets of the kanika and anuratha are designed as khakhara mundis. The mundi niches of the kanika evidently housed eight seated dikpalas of whom Agni, yama, Nirriti and Isana have been recovered from the debris around the main temple. The mundi niches in the anuratha were probably filled with representations of king Narasimha in various roles such as an archer, on a swing, in the company of learned persons, etc. The lower jangha, in the central projections of the bada, has more than life-sized images of Surya as Parsvadevatas. Both Parsvadevatas on the South and West, stand on a chariot holding lotus in two hands. The Western Surya wears a bejeweled kirita-mukuta, while Southern Surya has a stupa shaped bun on the head. Surya, in the northern niche, is riding on a magnificent horse fully equipped with rich trappings. The recesses between the rathas have different form of vidalas of which fragments are still extant.

The centre facet of the kanika and anuratha was designed as pidha mundis. The kanika niches seems to have housed dikpala patnis, of which an image of Varunani has been recovered from the debris. The niche images of the anuratha were various divinities. The recesses of the upper jangha were filled with female figures in various roles. On the eastern wall of the temple, in the Southern flank, a female figure with a long veni is visible in the recess between the anuratha and kanika.

The temple is now devoid of its baranda, the majestic gandi and the mastaka. James Fergusson prepared a drawing of the temple in 1837 based on actual observation. Of the great tower, writes Fergusson 'only one fragment, one angle remains, rising to a height of about 140 to 150 feet'. There is no doubt that it was a rekha temple with curvilinear superstructure and decorative programme of contemporary temples. Based on the drawing of Fergusson prepared in 1837 and his conjectural elevation of temple (woodcut No. 123, in *History of Indian and Eastern Architecture*) and contemporary practices in Orissa, it may be assumed that the deula, pancharatha on plan had its kanika paga disposed in two planes, and divided into ten bhumis marked by



bhumi amlas. The flat portion of kanika was probably decorated with a row of superimposed vajra mundis. The anuratha, probably had a succession of four diminishing replicas of the rekha deula. The decoration of the raha would have been an elaborate chaitya window with projecting lion, rampant on an elephant; the one on the eastern face being larger and placed at a higher level than the others. The huge lion on elephant, which lies in three fragments in the northern courtyard, apparently adorned the front raha of the temple. In 1868 R.L. Mitra noticed a figure of rampant lion which had projected from the southern face of the temple. He guesses the size 'to be about 14 feet and its weight, including that of the horizontal portion, which was built into the wall, to be about six tons. It has jutted out in the air at a height of about a hundred feet from the ground'.

The crowning elements, as usual in an Orissan rekha temple, evidently consisted of beki, amla, khapuri, kalasa, and ayudha. The kalasa was probably similar to the one belongs to Kapilas temple which was built by Narasimha-I.

The stupendous amalaka seems to have been supported by dopicha lions at corners and four armed seated figures, one each above the raha. One such figure is preserved in museum at konark, while another four-armed image of Aditya is kept in the Indian Museum Kolkota. The stone kalasa, crowned by lotus finial, was missing when the measurement of the temple was taken in 1628 but the iron rod, called Chumbaka luha dharana, which projected above the temple, was still in position.

The height of the main temple is now a matter of conjecture and calculation. According to architectural traditions of Orissa the main temple or deula is greater in height than the jagamohana. The earlier drawings of temple in 1680 and especially by James Fergusson in 1837, show that the main temple was higher than the Jagamohana. M.M. Ganguly, on the basis of measurements and relative proportion of Orissan temples, came to a conclusion that height of bada is the height of the pabhaga multiplied by  $13/3$  and the height of the rekha deula exclusive of kalasa is usually three times the height of the bada. Thus according to the



calculation of M.M. Ganguly the height of temple was 228 ft (69.5 m). Abul Fazl believed that the height of the temple was 150 cubits and if one hasta is equal to 18 inches, the total height was about 225 feet. A general idea about the height of the temple can be had from the measurement made in 1628. The height of the main temple from the ground level, according to that document, seems to be 226 ft, 6 inches or about 69 m. The extraordinary height of the temple made a profound impression on Jivadevacary who in 1510 refers to 'the banner of the steeple of which struck the heaven. In 1626 Mahmubdin Amir Wali was impressed by the exceptional height of the temple. A Mughal soldier's arrow could not reach its pinnacle.

There is no access to the interior of the deula from the jagamohana as the latter has been packed with sand and stone to prevent its fall. One can, however, get into the interior through the reconstructed steps by the side of the western parsvadevata. The walls of the main temple, are plain except for a set of three mouldings at a height of 1.5m. The walls were originally plastered, of which traces are visible. The floor of the sanctum is square of 10m and is paved with chlorite slabs. The floor slopes towards the central part of the north wall, where there is a channel to drain out washings from the interior.

The most impressive feature is the superb simhasana of chlorite, 3.8m. by 2.2m, meant for the presiding deity. The simhasana is about 1.2m in height, and rests on a low upana decorated with a frieze of elephants. The overall design of the platform consists of a pabhaga, recessed jangha and the baranda. The pabhaga is made of three mouldings. The two bottom mouldings in the central raha depict a royal elephant being fed by an attendant. The recessed jangha has dopichha Gaja simha motifs at the corners and decorative pavilions and pilasters in the intervening space. On the east, the raha compartment depicts the kneeling king Narasimha-I receiving a garland from the priest. The right compartment depicts the kneeling queen along with her six female attendants. The next compartment, as also the compartment on the north side are filled with female attendants



of the queen. The left side compartment and those on the South depict male followers of the king. The baranda of the platform consists of three ornate mouldings. On the top of the platform, a chlorite pedestal was found during clearance of the debris. It was without any image. On the western side of the jagamohana there was a passage leading to the interior of the deula. The partial removal of stone from jagamohana has revealed the beautiful chlorite doorframe of the sanctum. The door still is in the form of moon stone flanked by two other semicircles, one at each ends. The doorframe, divided into sakhas, is identical in treatment with the eastern doorframe of the jagamohan. The passage is paved with slabs of chlorite. The flat ceiling of the passage is formed of long stone slabs supported by three iron beams. Above this, there was a chamber, access to which was provided through steps in the backwall.

There are three subsidiary temples (nisa deulas) in front of the parsvadevatas on the South, West and North side of the main temple. These temples formed parts of the original scheme and stand on the common pitha on which the deula and jagamohana are erected. Each temple had central openings on the rahas and was designed as a sanctum with a porch in front. Below the extant platforms fronting the parsvadevatas there are three inner cells, which excluding the one on the north, housed certain deities now no larger in existence. This is evident from Khakharamundi niches, which are now empty. The nisa temple on the north provided the outlet for clearance of ceremonial washings from the interior of the temple. The nisa shrines, do not possess their superstructures. The extant walls give us an idea about the decorative programme. As usual in Orissan temples, pabhaga consists of five mouldings, jangha is divided into lower and upper by a bandhana of three mouldings. The Khakhara and pidha mundis are seen in the lower and upper jangha respectively. The porch is provided with three doors on the rahas. The recesses between the rathas are occupied by various forms of gaja vidalas. The door ways of these chambers had door guards at the bottom, of the ornamented jambs, Gaja Laksmi in the lintel and a navagraha slab on the architrave.



The *Kapili* or the junction wall connecting the deula with the jagamohan provides the necessary space between the two so that there is no overlapping of architectural elements as in the case of the Lingaraja temple. The judicious spacing makes the two structures separate externally even though they are connected internally and form parts of one architectural scheme. The exterior walls are decorated with scroll work and ornamental pilasters. The walls are distinguished by two large figures on each side; the lower register depicts a lion with a rider rampant on an elephant, which also carries a rider, while the upper portion has a life-size couple.

### **The Jagamohana**

Fronting the deula on the east the stupendous jagamohana or the mukhasala, nearly 39m. in height, dominates the landscape for many miles. Built on the same platform as the deula and rising close to it on the east, the jagamohana is conspicuous by a pyramidal roof. The jagamohana is divided into four divisions along the vertical plane, viz, pitha, bada, gandi and mastaa. The temple is pancharatha in plan and the page designs are maintained both in the bada and gandi. The overall design follows the pancharatha model of the Lingaraja and the temple of Lord Jagannatha at Puri.

The pitha consists of two mouldings. The bada of the jagamohana is divided into five principal parts, such as pabhaga, tala jangha, bandhana, upper jangha and baranda. The raha projections are designed as portals and hence there are four entrance portals of the jagamohana. In view of this, five fold divisions of the bada are limited to the kanika and anuratha. The pabhaga measures 2.7m in height and consists of five mouldings, viz, khura, kumbha, pata, kani and basanta. The khakhara mundis have been inserted into the Kanika and anuratha. Each khakhara mundi is flanked by two decorated pilasters on each side. The two inner pilasters, entwined by naga and nagi, have at their bottom two lions vanguishing an elephant. Each of the naga nagi pilaster is crowned by a Vajramundi motif. The outer pilasters have a base of three mouldings, pancharatha shaft crowned by



khakhara mundis resting over a set of three mouldings. The mundi niches contain various scenes such as royal person with his subordinates, soldier on the shoulder of another person, teaching scene, hunting scene, etc.

The jangha is divided into two registers by bandhana, consisting of five mouldings. Both the kanika and anuratha contain elongated khakhara mundis with flanking pilasters in the lower jangha. The inner pilasters are decorated with erotic figures, while the outside pilasters are richly ornamented with scroll work. The upper jangha contains pidha mundis with two pilasters each on either side, thus continuing the design of the lower jangha in the same vertical plane. The recess between the rathas form a splay and is filled with vidalas in the lower jangha and erotic couples in the upper jangha. The recesses are about 0.7m wide and have their side wings decorated with scroll work. The treatment of the bada, with projecting pagas, and splayed recesses, adds to the beauty and overall clarity of the paga design. The baranda consists of ten mouldings which do not interfere with the curves and lines of the pancharatha plan of the jagamohana. The mundi niches in the lower and upper jangha are now empty. It is probable that some of the chlorite sculptures, recovered from the site, originally belonged to these mundi niches. The Kanika niches in the lower jangha, originally contained images of the dikpalas while the corresponding niches in the upper jangha presumably had their female counter parts.

The pyramidal roof of the jagamohana, is made of eleven pidhas arranged in three tiers. The roof stylistically resembles that of the Lingaraja temple, but there are only two tiers in the Lingaraja Jagmohana. The lower two tiers of the jagamohana at Konark consists of six pidhas each, with their vertical faces carved with processions of elephants and soldiers. The third tier consists of a group of five mouldings which are without any ornamentation. A notable feature of the jagamohana, is that each tier is separated from the other by a recessed vertical wall. Further on the upper half of each tier on all sides, the raha is crowned by a bhadra-mastaka with its bell shaped member called





Deula: Detached sculpture of dikpala Agni (Konark Museum)





Deula: Detached sculpture of dikpala, Isana, National Musuem, New Delhi.





King Narasimha on a swing, National Museum, New Delhi.





King reading a copper plate charter, platform.





King Narasimha practicing archery.





Detached image Varunani, possibly from upper jangha of Jagamohana, National Museum, New Delhi





Natamandira, entrance pillar.





Natamandira, view of an interior pillar with an image of Surya





Detached sculpture showing dragging of Stone Block, Konark Museum.



Detached image of Surya, National Museum, New Delhi





Vishnu, Detached sculpture, National Museum,  
New Delhi.





Alasa Kanya Fragment, Rietberg Museum, Zurich.





Naga-nagi pilasters, platform.



Details of a Vidala.





Representation of Vidala motifs.



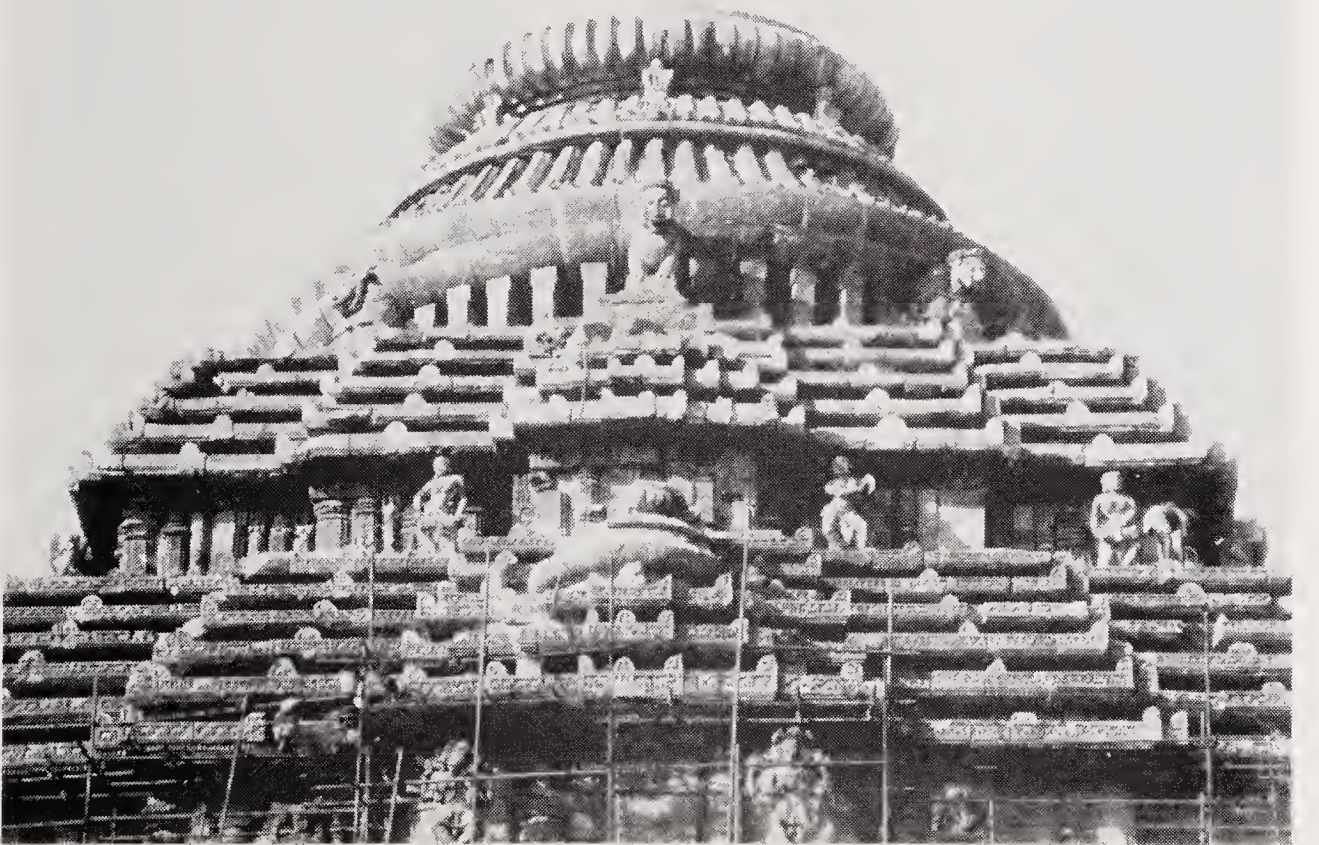


Ravi-detached graha image, British Museum, London.





View of the Sun temple before repair, ASI.



Ghanta of Jagamohana Supported by masonry pillars built in 1918-19. Top view of Jagamohana, ASI.





Jagamohana, before repair, view from east, ASI.



ghantas. The terraces, fronting recessed vertical wall in each of the first two tiers, are occupied by sixteen graceful sura sundaris playing on musical instruments with rapturous delight. Each female figure stands above each paga of the terrace. In addition to the female musicians, a pair of Marttanda Bhairavas occupy the terrace of the first tier at both ends of the raha. Their purpose was probably to protect the temple from evil influences. The placements of female musicians on the parapets of the jagamohana is in keeping with the tradition recorded in the *Surya sataka* of Mayura that Surya is to be praised by celestial Choristers with the accompaniment of musical instruments such as cymbal, the drum and flute. The recessed vertical walls, locally called Kanti, contain khakhara mundis, naga-nagi pilasters, alasa kanya and elephant frieze. The female figures are carved in alto relievo.

The mastaka of the jagamohana, as in a full fledged pidha temple, is successively composed of beki, ghanta, followed again by a succession of beki, amla, khapuri. In 1918-1919 small masonry pillars were built to support ghanta (bell shaped member) of the jagamohana. The Kalasa crowning the roof was missing, when the conservation of the jagamohana was taken up in early part of twentieth century, only one iron rod was seen on the top, presumably it was meant to hold the kalasa in position.

The interior of the jagamohana has been filled up to prevent the collapse of the structure. As usual in an Orissan temple the walls were devoid of decoration. The ground plan is square. The walls of the jagamohana rise vertically upto a particular height and thereafter stones are arranged in the manner of inverted stairs until the two walls come nearer to facilitate spanning. There was a lower ceiling in the interior supported on lintels which were reinforced by iron beams. There were four massive pillars in the interior to support this lower ceiling. In 1837, Fergusson had seen those pillars but by 1868, they had collapsed. R.L. Mitra, who visited Konark at the close of 1868, observed as follows.

“The interior of the chamber is plain. The walls are plastered and white washed, but not set off with any carving. A plain moulding formed of a cyma and tile run all round the room at



height of 5 feet from the floor and that is the only decoration which has been attempted for the interior. The floor is entirely covered by a large mass of rubbish, which has resulted from the fall of a false flat ceiling which originally covered the under surface of the pyramidal roof. This ceiling was supported on four square pillars which had divided the area of the room into nave and two isles. The remains of these pillars are still to be found in the midst of the rubbish, as also the iron beams which were laid over them, and which extended from them to the side walls to support the ceiling. The beams are of thick scantling and from 12 to 20 feet long. A few of the beams are sticking to the walls by one end, the other hanging in the air. The ceiling formed no part of the roof and there was considerable space left vacant between it and the roof”.

Access into the interior of the jagamohana is provided through magnificent doorways on the east, south and north. On the western side, there is doorway leading from the jagamohana to the sanctum. Access to the doorway is provided by three stair ways on the east, south and north. Each of the three entrance portals had a pair of impressive pilasters supporting multifoil arches. The torana is found in the decorative programme of contemporary temple such as Gangesvari temple, Bayalisvati and mukhamandapa of Varaha Narasimha temple, Simhachalam. The discovery of some fragments of the arches at konark, prove beyond doubt about the existence of the corbelled arches in the decorative programme of the three rahas of the jagamohana. The flanking pilasters and a triangular niche over the doorway are visible in the drawings of Andrew Stirling in 1825 and Fergusson in 1837. But in 1868 Rajendralala Mitra found no trace of them. The central niche within the multifoil arch, contained a seated image of Surya. The architrave below, which rested on iron beam, was decorated and with nine grahas. The navagraha slab made of chlorite is about 6.1m in length and 1.1m in height. The nine grahas are (1) Surya (2) Soma (3) Mangala (4) Budha (5) Brihaspati (6) Sukra (7) Sani (8) Rahu and (9) Ketu. Similar navagraha slab possibly also existed over the southern and northern portals. Some of the



chlorite graha images such as a detached image of Ketu kept at Chandrabhaga, near Konark and graha images displayed in the British museum are stylistically similar and possibly hailed from Konark. The navagraha slab, that decorates the entrance gate of the Gundicha temple at Puri, was probably removed from Konark and placed there. The impressive doorframes, constituted one of the most remarkable features of the temple. Each doorframe, made of chlorite stone consists of seven bands, a pair of door guards at the base and Gaja Laksmi in the centre panel of the lintel. On the top panel is depicted a seated royal figure within a makara torana. The fragment of a door frame lintel lies below a banyan tree. The door frame of the eastern portal still exists in its original position. The magnificent doorframe of the eastern doorway, rectangular in shape is enclosed in an elegant frame, which is decorated with refined lotus petals at the outermost ends. The door sill has disappeared. The sakhas start from the top of vajramundis with various figures at the base such as doorguards, standing naga figures, kanya, kinnara playing cymbals and flute, male figures, etc. the seven sakhas are relieved with (1) foliated leaves (2) coil of naga couple (3) succession of pavilions housing amorous couples, (4) meandering creeper motif with playful pot bellied boys, (5) rows of pillars with moulding and kirtimukha motifs (6) amorous couple and (7) foliage with fruit motif, locally known as varajhanji. The elaborate doorframe of the eastern entrance received praise from Andrew Stirling in the following words:

“The skill and labour of the best artists, seem to have been reserved for the finely polished slabs of chlorite, which line and decorate the outer faces of the doorway. The whole of the sculpture on these figures, comprising men and animals, foliage, and arabesque patters, is executed with a degree of taste, propriety, and freedom, which would stand a comparison with some of our best specimen of Gothic architectural ornament. The workmanship remains, too, as perfect, as if it had just come from under the chisel of the sculptor, owing to the extreme hardness and durability of the stone”.



The entrance portals of the jagamohana were originally arranged by freestanding pair of animals. The colossal gajasimha pair was placed flanking the sides of the eastern stairway. The artists of Colin Mackenzie in 1815 and Kittoe in 1838 made drawings of the lion on elephant motif which was still visible on a high platform. By the time of Andrew Stirling, however, the pair of horses of the south and elephants one the north, had been fallen from their bases. In 1838 Kittoe observed “Before the northern doorway, are two colossal elephants nearly buried in the sand and ruins, with drivers seated on them, and foot soldier beside them, the elephants are supposed to be covered with jewels and armour; before the southern entrance are two horses and attendants to each, equally elegantly caparisoned before the eastern doorway are two huge lions rampant with an elephant couching beneath each, one of which is still erect, of which I took a drawing”. In 1868, Rajendralala Mitra saw the animals “lying by the three doorways, of the porch of the temple and their pedestals are still traceable there”. Under orders of Ashley Eden, the colossal animals were removed from the stair ways and placed on specially constructed platforms at a short distance from the jagamohana. The lion on elephant sculptures were placed on a high mound on the east which later on proved to be the Natamandir. During clearance of sand and debris, Gaja simhas appeared on the top of the natamandira. Therefore these were brought down and placed in front of the eastern stairway of the natamandira.

### **The Sun Pillar**

There was a magnificent column of chlorite surmounted by a small figure of Aruna the charioteer of Surya. While describing the Konark temple Abul Fazl refers to the “octagonal column of blackstone” which is evidently the Sun pillar (Aruna Stambha). Andrew Stirling in 1825 observed, “Fronting the simha gate, stood the beautiful polygonal column, formed of a single shaft of black basalt, which now adorns the entrance of the Puri temple, having been brought from the famous but now deserted temple of the



Sun at Konark about sixty years ago by a Brahamachari inhabitant of Puri, of great wealth and influence". The tradition recorded in the Madala Panji, chronicle of Jagannatha Temple, mentioned that the Aruna pillar was removed from Konark by the Marathaguru Brahamachari Gosain and placed it in front of the simha dvara (Lion's Gate) of Jagannath temple during the reign of Divyasimha Deva (1781 to 1799 A.D.). In 1815 the artists of Colin Makenzie prepared a sketch of the pillar at Puri on 26<sup>th</sup> April. The pillar seems to have been removed to Puri in the last quarter of the 18<sup>th</sup> century.

The pillar consists of a beautiful base, a sixteen sided monolithic shaft and floral capital surmounted by Aruna. The pillar rising over a platform, rests over a low upana with its vertical face carved with military and animal processions. The friezes on the western face represent a number of devotees. The chlorite platform above the upana, is pancharatha on plan, and consists of three ornate mouldings-*khura*, *kani* and *basanta*. The *khura* is relieved with scroll work and lotus petals, *kani* is plain and *basanta* is decorated with rows of geese and lotus petals.

Above this the pillar rises from a beautiful base resembling a full blown lotus. At the four corners are dopicha gaja sinha motifs with four chaitya window motifs in the centre.

The monolithic shaft, nearly 2m in circumference is sixteen sided. It terminated with an inverted Khura shaped member relieved with lotus petals, which has set of two mouldings below. Above this are two gradually diminishing square slabs surmounted by the image of Aruna in the act of praying to the Sun god. The column is about 10.5m in height. The pillar is a monument of great beautiful and the taste and artistic skill displayed in the ornamentation of this pillar are quite remarkable. From the Vedic times, Surya is taken to be identical with Vishnu. Hence it was quite appropriate to place it in front of the temple of Vishnu-Jagannatha at Puri.



## The Natamandira

The nata mandira has been built as a detached structure to the east of the open space in front of the Jagamohana. When R.L. Mitra visited the site in 1868, the structure was indicated by a huge “mass of rubbish over grown with jungle”. He believed that the entire structure was bodily transferred to Puri by Marathas and was set up as the bhoga mandapa of the Jagannatha temple. The ruined structure, however, was exposed to view after clearance proving thereby that R.L. Mitra was wrong.

The plan of the natamandira is square. It is built on a high pitha or platform which is 23.8m square. It rises over a low upana composed of three plan moulding. The platform is 3.6m high. It is pancharatha on plan but its projections are not bold and conspicuous. The wall of the platform, on each side, has five horizontal divisions such as pabhaga, lower jangha, bandhana, upper jangha and baranda. The pabhaga, consists of the usual five mouldings only at the corner of the rathas. In the intervening space there are series of Khakhara mundis (flanked by pilasters). The mundi niches contain female and male figures in various roles. With honeycomb pattern in the background, the decorative pilasters are relieved with graceful female figures. They are depicted in different roles : carrying offerings, wringing water from hair, holding a branch of a tree, playing with a pet bird, looking at the mirror etc.

The lower jangha division of the wall is filled with vajramundis and pilasters. The mundi niches contain various figures such as elephant riders, wrestlers, a man fighting with wild animal, a cavalier engaged in hunting, seated dikpalas, and other divinities such as Ganesa and Gaja Laksmi. The pilaster figures represent mostly female dancers and musicians.

The bandhana connecting the lower and upper jangha consists of three richly carved mouldings. The upper jangha closely follows the lower jangha in decorative details. Some of the vajra mundi niches contain dikpala patnis. The upper jangha is surmounted by a baranda of three mouldings, the top most one is carved with friezes carved of military processions. At intervals, the baranda



is provided with projecting gargoyles fashioned as makara heads, female figures, figure of tortoise and ganas in the attitude of supporting the superstructure.

The decoration of the wall of the platform is similar to the bada of a temple, decorated with female dancers, musicians, scroll work, honey comb patterns, animal motifs, ganas, dikpalas, etc. The overall effect is one of great beauty. There are four stairways in the centre on all four sides. The eastern stairway forming the main entrance is framed by a plain parapet. The colossal gaja-simhas fronting the eastern stairway, did not form the original design, and their placement there dates back to the beginning of the twentieth century. The northern stairway, composed of a series of steps simulating moonstones, is also flanked by parapets. The design of the western stairway is different from others. From the top steps descend in form of semicircles facing West and thereafter these are bifurcated into two flight of steps, one towards the north and the other to the south. The façade of the central wall is decorated with female figures, mostly carrying musical instruments. The double stairway was probably due to the position of the Arun Stambha and the pair of colossal gaja-simhas in front of the jagamohana.

On the top of the first platform, the second pitha is laid out, leaving a berm around the natamandira. This plinth or platform is 1.4m high. It has three horizontal divisions pabhaga, jangha and baranda. The pabhaga consists of three mouldings. The jangha has Gajasimha motifs at the corner and khakharamundis, and oblong niches filled with various motifs such as male and female musicians and alasa kanyas. A male musician, adjoining the east stairway, has an inscriptions on the pedestal, which reads "Somai Vaisnava". It is likely that he was associated with natamandira as the dance master. A baranada or a cornice of three decorated mouldings form the jangha.

The interior of the Natamandira is reached by a flight of three steps in the centre of the four sides. Thus there are four central openings, each 3m wide, and flanked by the pillars. Each pillar projects forward from the wall. At the base of each pillar



there are set of five ornamented mouldings, the round shaft is decorated with dancers and musicians, and crowned by kirtomukhas with pearlstring hangings. The capital of the pillars, rests over a set of three mouldings, and resembles a lotus with upturned petals. Lotus pendants also project out from the top.

The Natamandira is not a closed hall, on each of the four sides, there are four pillars including the two pillars flanking the central openings. Thus on each side, on the east, south and west there are three entrances including the major entrance. On the north, however, there is only one entrance, the intervening space between the pillars have been closed by regular walls. The openings in the east and west in perfect alignment may have been meant to take the rays of the rising Sun into the Jagamohana and the garbhagriha during specific occasions of the year. The closed bays on the north may have served the retiring place for the dancers. Each entrance was originally spanned by multi foil arches.

The bada or wall portion of the Natamandira, has five horizontal divisions. These divisions are limited to Kanika and anuratha in view of the opening. The pabhaga is composed of a series of five mouldings decorated with khakhara mundis and flanking pilasters. The mundi niches, among others, house dikpalas while pilasters are mostly carved with female musicians and dancers.

The janghas contain khakharamundis in the lower one and pidhamundis in the upper, the latter with consorts of dikpalas in the mundi niches. The pilasters are ornately carved with female figures. The bandhana connecting the lower and the upper jangha consists of three mouldings. The baranda, partially surviving at places, has nine carved mouldings, connected at intervals by vertical bands. The top portions of the baranda are further distinguished by elegant lotus pendants, some of which are still extant.

The interior of the hall is about 12m square. It has four massive pillars which are perfectly aligned with the pillars flanking the four major entrances. The rows of pillars divide the floor of



the natamandira into nine compartments, probably indicating some association with the nine grahas. An image of Surya, placed on a pedestal, was discovered during the first clearance of debris. The interior walls of the Natamandira are plain but each of the four pillars of the interior triratha in plan has plain base. Its lower jangha portion is decorated with devotees or females carrying fly whisks, offering pots, garland of flowers etc. the bandhana consists of three ornate mouldings. The facets and recesses of the upper jangha are gracefully decorated with dancers and musicians.

The Natamandira is now open to the sky; its roof has completely disappeared. During the first clearance of debris in 1906, a portion of the roof existed in the north and south east corner. In all probability, it had a pyramidal roof. A huge piece of stone carved as a full blown lotus with a seated Surya in the centre, seems to have formed a part of the ceiling of the garbhama of the temple. This is remarkable for the artistic arrangement of lotus petals in two circles, the inner circle contains eight petals, while the outer circle has sixteen petals, each decorated with a dancer or dancing musicians. Such interior decoration of the ceiling is found in the jagamohana of Muktesvar and Brahanesvar temples at Bhubaneswar. The tradition of carving the ceiling with a lotus design goes back to the Gupta age as at Tawa cave, Udayagiri. In the Jalesvara temple, Kalarahang there is an elaborate lotus design in the ceiling of the Jagamohana. It is thus probable that the ceiling of the Natamandira had a lotus design which is quite appropriate in a Sun temple.

The construction of this pillard mandapa in front of the Jagamohana may have been an after thought. The main temple complex with deula and jagamohana, Aruna pillar and pair of colossal guardian animals, formed an integral part of the original architectural scheme. The ritual requirements of dance and other festivals necessitated however the erection of this mandaps. The Gaja simhas are usually placed at the front entrance but in case of this temple these continued at the back when this pillard mandap was constructed. In general, the sculptural features of this temple are quite different in style and from those of the main



temple complex. The stairway on the West could not run towards the West but has to be altered into a double flights of steps, thereby covering many beautiful sculptures on the Western façade of the platform. This structure was apparently erected some time later than the deula and jagamohana, though the time gap could not have been very long. Like the main temple complex, the natamandira may be assigned to the mid-thirteenth century. The plan of the structure as a separate unit, only followed the established tradition of erecting deula and jagamohan as one unit and pillared hall as a detached unit. The Yamesvar temple at Bhubaneswar and some other temples in coastal Orissa follow this type of planning of pillared mandapa in front of the jagamohana instead of placing the three structures together in east west axial alignment. The erection of this structure on high platform, with elaborate carvings is a matching monument and adds to the grandeur of the Konark temple. The construction of the temple as a solar chariot, made it necessary to construct a Natamandir as separate structure. There are different, often disputed, views regarding the identification of this temple. Some scholars believe that it was a bhogamandapa or a refectory as pillars and very narrow space inside would not have been suitable for the natamandira.

By the second half of the 12<sup>th</sup> century, the construction of natamandira has been in vogue while erection of bhogamandapa was not popular until about the 15<sup>th</sup> century. The pillared hall in front of the jagamohana was a natamandira in keeping with the prescription of the *Bhavisya purana* which recommends construction of the dance hall (Preksanaka) for the Sun god and dedication of group of harlots (vesya) in honour of the deity. This was considered highly meritorious. Further, Narasimha-I, the builder of Konark temple is known to have provided one hundred dancers (sanis) for the Varaha Narasimha temple at Simhachalam. The general of Narasimha-I, according to the inscriptional evidence built a natamandapa at Simhachalam. The Chinese pilgrim Hiuen Tang in the 7<sup>th</sup> century refers to dancing girls associated with the Sun temple at Multan. Narasimha-I seems to have followed this



established tradition in erecting the natamandira. It may not be argued that presence of pillars in a hall makes it unsuitable for natamandira. Even Bharatamuni's Natyasastra, refers to the tradition of raising four pillars in the interior of the *ranga pitha*. The Kalyana mandapa of Simhachalam temple, which is evidently identical with the Natyamandapa, mentioned in an inscription of A.D. 1268, has seventy eight pillars. Therefore, presence of pillars did not make a building unsuitable for a natamandira.

The profusion of dance sculptures, particularly depiction of a male musician with a short inscription on the pedestal, amply supports the identification of this temple with Natamandira. T.N. Ramachandran takes the male musician as the Natyacharya or dance master of the natamandira.



# SUBSIDIARY TEMPLES IN THE COMPOUND

## An Earlier Sun Temple

The remains of a temple, came to view to south-west of the Konark temple after clearance of sand. Facing the east the temple made of khondalite consists of a deula, Jagamohana and a projecting platform on the east. Of the temple, only a portion of the bada survives and superstructures of both deula and jagamohan are completely missing. Originally however, as in an Orissan temple, the deula had a curvilinear super structure and the jagamohana had a pyramidal roof. Both the structures rise over a pitha consisting of three ornamented mouldings.

The deula approximately 8.53m square is Saptaratha in plan. The bada evidently had five divisions, but now only the pabhaga and a portion of tala jangha survive. The pabhaga consists of five moulding. Beneath the raha niches are elongated Khakhra mundis flanked by a Naga and Nagi stambha having gaja-simha motif at the bottom. The image in the western mundi represents a six-armed Nataraja, while on the north and south the niches house amorous couples.

The lower jangha of the deula is embellished with kakhara mundi motif. In the corner niches were eight dikpalas of which only Agni remains in situ on the south-east. In the mundis of the anartha niches there were various figures of which an image of Surya partially survives on the north side.

Two parsva – devata images of Surya are in situ in the south and north. The western niche apparently had an image of the Sun god but was empty at the time of clearance of debris. The chlorite image of Surya in the south is now without its head and arms. Surya stands on lotus pedestal. The image, except for his



drapery and ornaments, looks stiff and inartistic. The Sun god Bhaskar, on the north is seated on the back of horse. He wears a jeweled crown, but his arms are also missing.

Like the deula, the jagamohana is also Saptaratha in plan. The Jagamohana stands in front of the deula and is part of one architectural scheme. The Kapili or junction connecting the two structures is decorated with three vertical projections with image of Surya on the north and alasa kanyas in the flanking niches.

The pabhaga of the jagamohana is composed of the usual five mouldings. In the kanika and anartha, the Khakhara mundis carry amorous figures and alasa kanyas. These are flanked by Naga and Nagi pilasters having at the base gaja simha motifs.

The jangha is divided into two registers by a bandhana of five mouldings. The upper jangha is missing. In place of the Naga-Nagi pilasters of the pabhaga, the Kanika and anartha have Khakhara mundis flanked on either side by alasa kanya pilaster with kalasa contain dikapala images such as Yama, Varuna, Vayu, Kubera and Ishan. The anartha niches contained grahas of which Rahu and Ketu are still in situ. The recesses between the rathas contain Gaja-vyalas. The jagamohana is provided with two balustrade windows on the north and south. The four balusters of each window are decorated with graceful female figures. Beneath each window an elongated khakra mundi is placed in the pabhaga.

In front of the Jagamohan there is a rectangular platform which seems to have been added in the mid thirteenth century. It is approximately of the same height as the pitha of the temple. Its façade on the north and south is decorated with tiny khakhara and vajra mundis with mithuna motifs in their niches. The khakhara mundis in the front, on either side of the flight of steps, contain in their niches two dvarapalas. Stylistically the figures of the platform resemble those of the Sun temple of Narasimha-I. The pillars flanking the main entrance are partially preserved. The door frame of the jagamohana and the architrave are missing.

The ground plan of the interior of the jagamohana is square. The interior walls are notable for their sculptural treatment. At intervals, the surface of the inner wall is decorated with ornamental



pilasters having at the base pabhaga mouldings, surmounted by female figures in framed niches in various roles such as playing the vina, carrying offering bowls, etc. On the top is a frieze of elephants. The inner north and south walls have each a corbelled niche beneath the balustrated windows. The lintel above the northern niche is relieved with military procession. To facilitate the spanning of the roof, the technique of corbelling has been used. In order to convert the square into an octagon, squinches in the form of corbels have been placed at the corners of the square room. The corbelling, projecting in this fashion continued till the space was sufficiently reduced to support the pyramidal roof. The vertical faces of the projecting stones show friezes of animals, war scenes, a king in a military camp, etc. The pyramidal roof, however, is missing. In the interior of the Jagamohana there are no pillars. The passage leading to the sanctum is provided with door-frame which is partially preserved. It probably consisted of three facets of which the naga sakhs (coil of snake) is extant. At the base of the door jambs are images of Ganga and Yamuna in the vajramundis, amorous couples in the Khakhara mundis and four-armed dvarapalas in the pidha mundis. The chlorite door sill is in the form of half moon with conchshell motif on either end. There is also a khandalite moon stone which is plain. The interior of the deula is devoid of ornamentation. The presiding deity was not found during the first clearance of the sanctum.

The temple architecturally and stylistically, is definitely earlier to the mid thirteenth century temple of Narasimha I. In depiction of mithuna motif, there is no profusion, as in the Konark temple. The figures of Sun gods are characterized by a diaphanous coat of mail in the chest, a feature absent at the Konark. The female figures of this temple, with their tall and slender forms contrast with the highly stylized figures of the Konark temple. In view of the above, versions of the *Baya Cakada*, palm leaf manuscript, that the Mahagayatri temple was constructed during the reign of Narasimha I, cannot be accepted. On the contrary, it seems to have been constructed prior to the Surya deula of Narasimha I

Scholars and local people applied different names for the



temple such as Mayadevi, Ramachandi, Mahagayatri and Chhayadevi which appear to be imaginative conjectures. Mayadevi was the mother of Buddha and her worship in a Sun temple is without any basis. A separate temple exists for Ramachandi at the mouth of the Kushabhadra river. The two parsvadevata images representing the Sun god and an image of Surya appearing in the niche on the north indicate that originally the temple was dedicated to the Sun god. It seems, however, that when the Surya temple was constructed by Narasimha I, and its puja image was transferred to the new one, the earlier temple was converted to the worship of his consort Chhayadevi. By the 12<sup>th</sup> century, as at Lingaraja and Jagannath temple, temples dedicated to the consort of the presiding deity became the usual practice. This tradition seems to have been followed at Konark. The identification with Maha Gayatri temple on the basis of a later manuscript is doubtful.

Stylistically this temple for the Sun god can be assigned to the late 11<sup>th</sup> century. One version of the Madala Panji refers to the construction of a Surya temple at Konark by Purandara Kesari. As in the tradition the Somavamsi rulers of Orissa were known as Kesari kings and though the name of Purandar does not occur in the dynastic list, there was a ruler called Indra Ratha who was defeated by Rajendra Chole in 1021 A.D. Another ruler called Puranjaya is also mentioned. It seems, probable that a Sun temple was constructed at Konark during the rule of the later Somavamsis. The Trienisvar temple near Konark, in the village of Madhipur, can be dated to the late 10<sup>th</sup> or early 11<sup>th</sup> century as its architectural and sculptural features are similar to the Muktesvara and the Gauri temple at Bhubaneswar. This indicated that the Sun temple was not an isolated monument.

This earlier Sun temple was enclosed by its own compound wall. When the Surya deula was construct by Narasimha I, a large enclosing wall was built for all the temples. In the process, the eastern and northern portions of the earlier enclosures were dismantled. In the compound wall the remains of the south-eastern corner of the original wall can be traced indicating that this temple originally had a separate enclosure. During the 13<sup>th</sup> century, most



probably, a rectangular platform was added to the temple along with the makara gargoyle on the north. This is evident from the striking similarity of erotic motifs and dvarapala figures with those on the Sun temple of Narasimha-I.

### **Brick Temple**

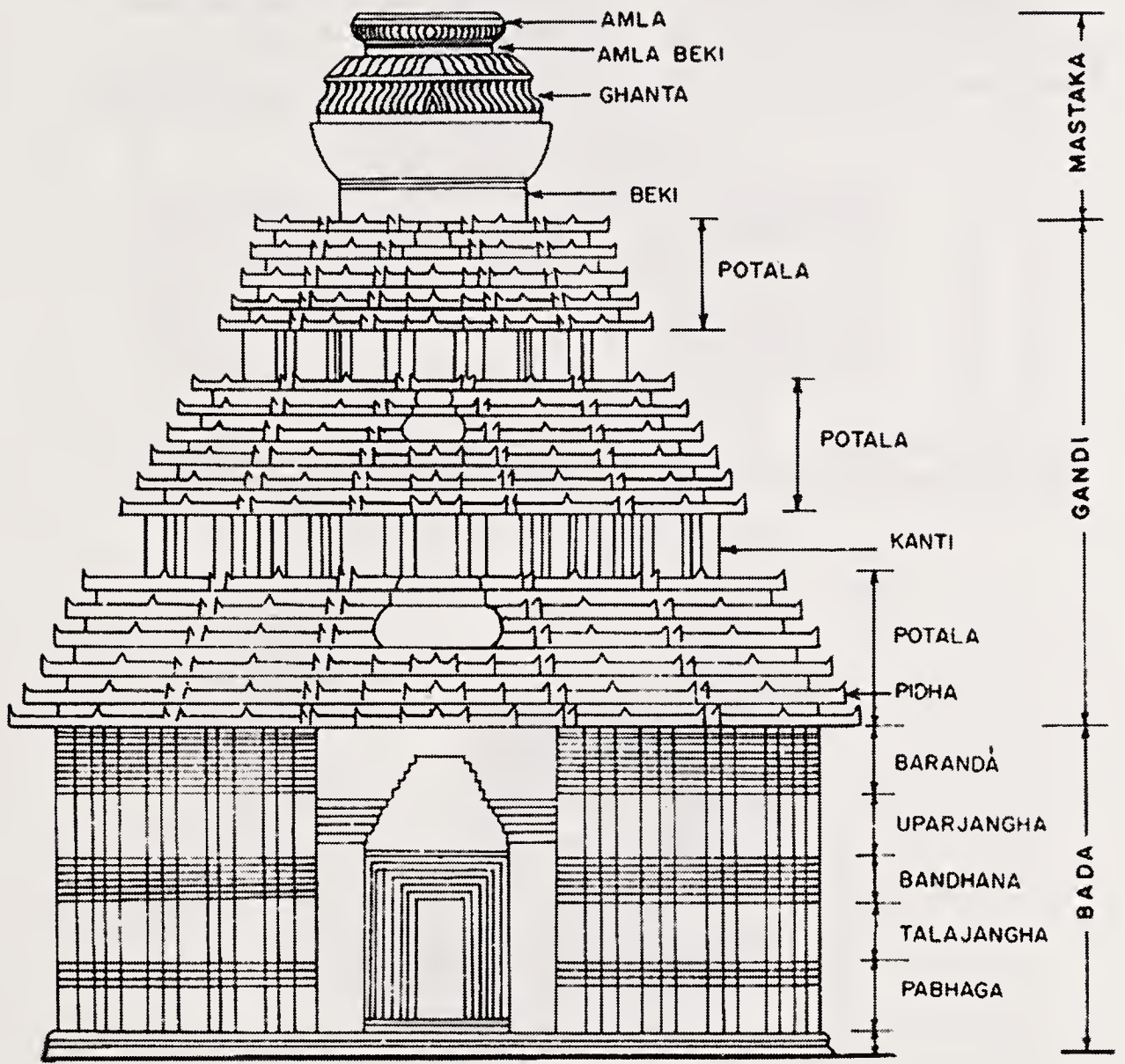
The remains of a brick temple are found in the south west corner of the compound. The temple came to view in 1955-56 when the compound was cleared of wind blown sand. In the coastal Orissa there are several brick temples, especially in the Prachi valley. Though ruined and built on a modest scale, the temple gives an idea about a brick temple of Orissa.

The temple, facing east, consists of a deula and Jagamohana. The temple is partially preserved and their superstructures are completely missing. The interior of the temple is plain. It is also without any exterior decoration.

The deula is pancharatha on plan. Its bada consists of the five usual divisions, i.e. pabhaga, jangha, bandhana and the baranda, the last one is missing. The pabhaga consists four mouldings, and the jangha is divided into two, lower jangha and upper jangha by a bandhana of two mouldings. In the raha niches, on each side of the deula there were three images of the Parsvadevatas. On the northern side, a drain was provided for clearance of water from the sanctum.

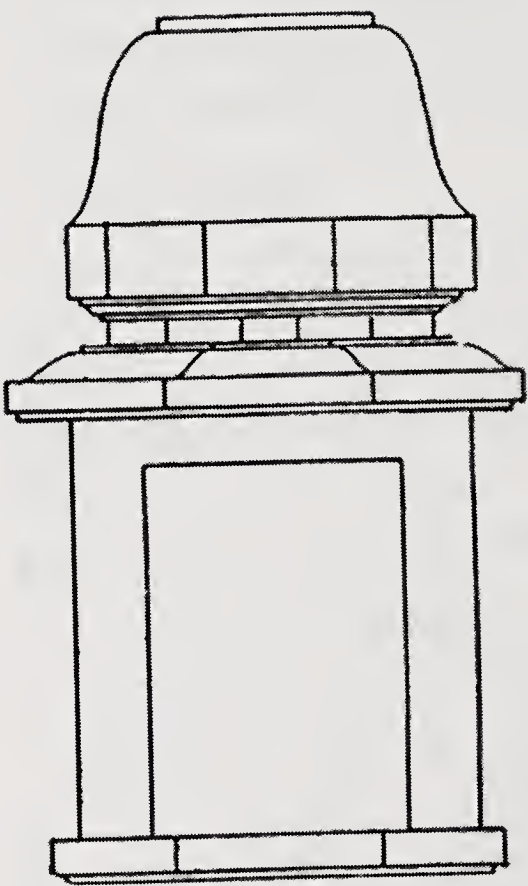
The jagamohana is also pancharatha in design. The pabhaga consists of three mouldings. The jangha is divided into two registers by a string course of one mouldings. Both the lower and upper janghas are decorated with khakhara and pidha mundis. There are two balustrated windows on the north and south. The raha on the eastern side, projecting forward from the wall, formed the main entrance to the temple. It has a stone door frame of which lower portion of the jambs survives. The door sill is in the form of a moonstone. The door jambs contain two fierce looking dvarapalas, the lintel and architrave are missing. The khondalite doorframe of the deula is made of three sakhas or bands with Ganga and Yamuna at the base. As usual, a figure of Gaja Lakasmi occurs on the lintel.



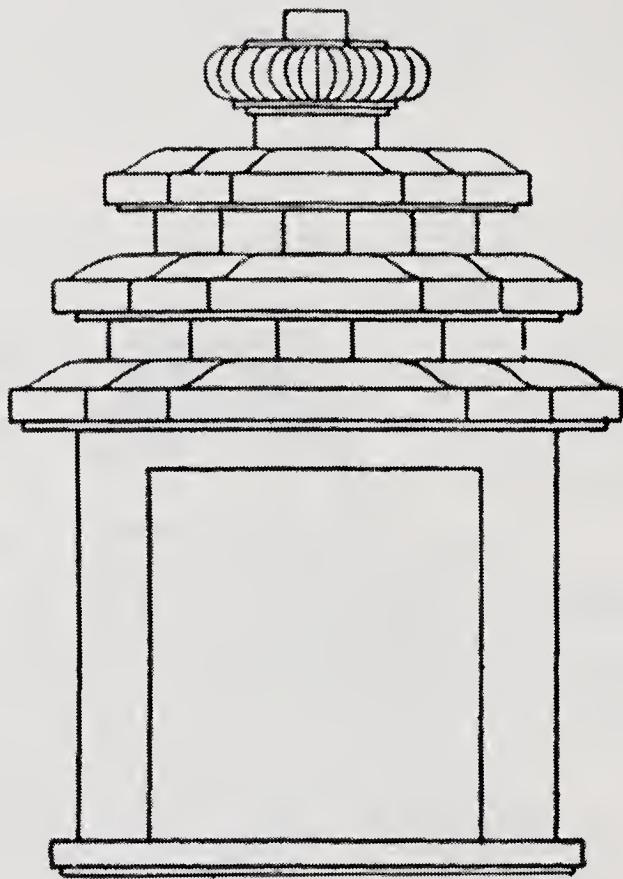


Elevation of Jagamohana, Eastern view.

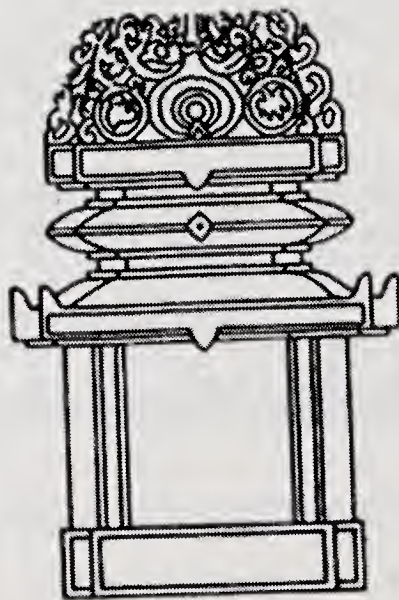




(a)



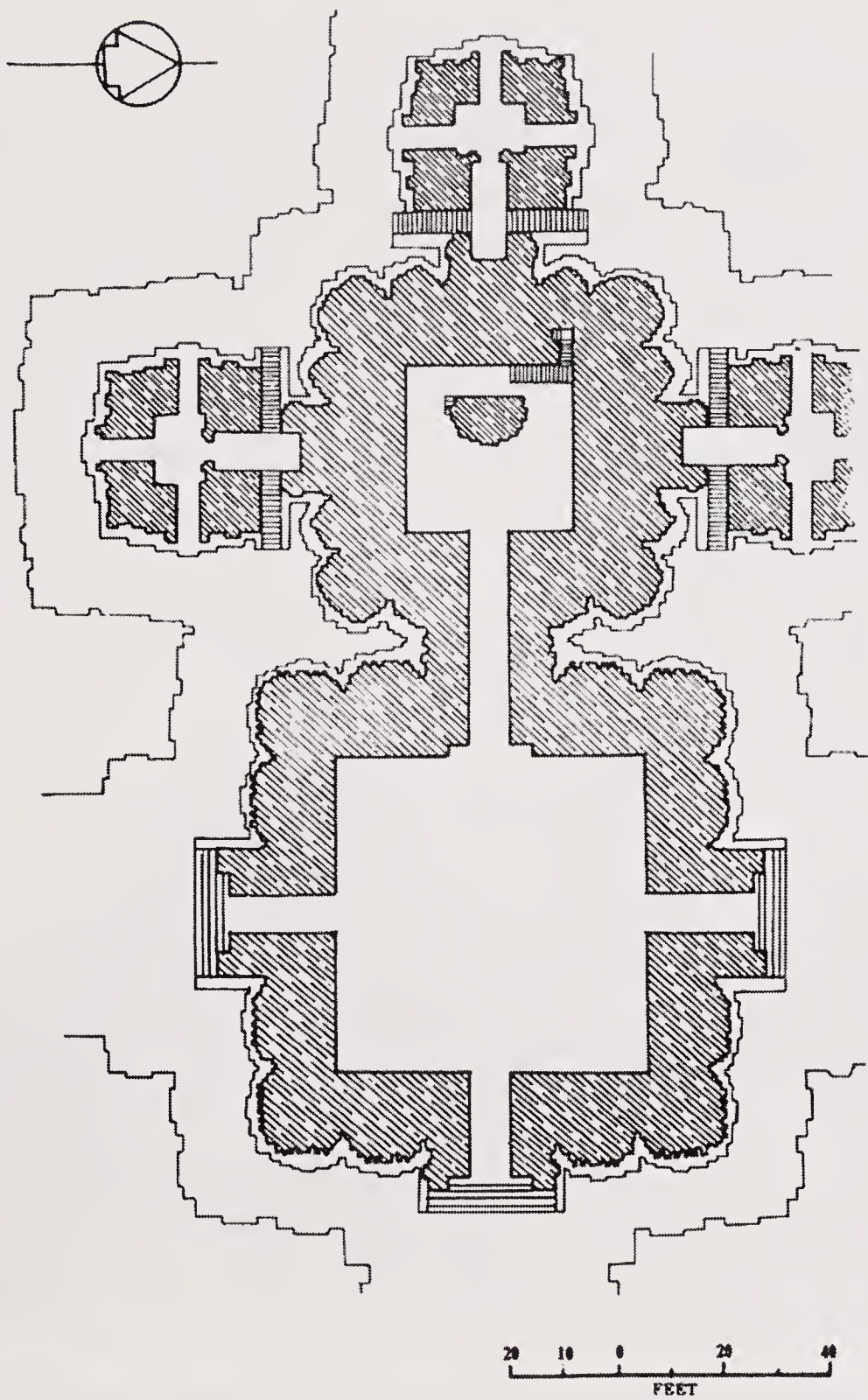
(b)



(c)

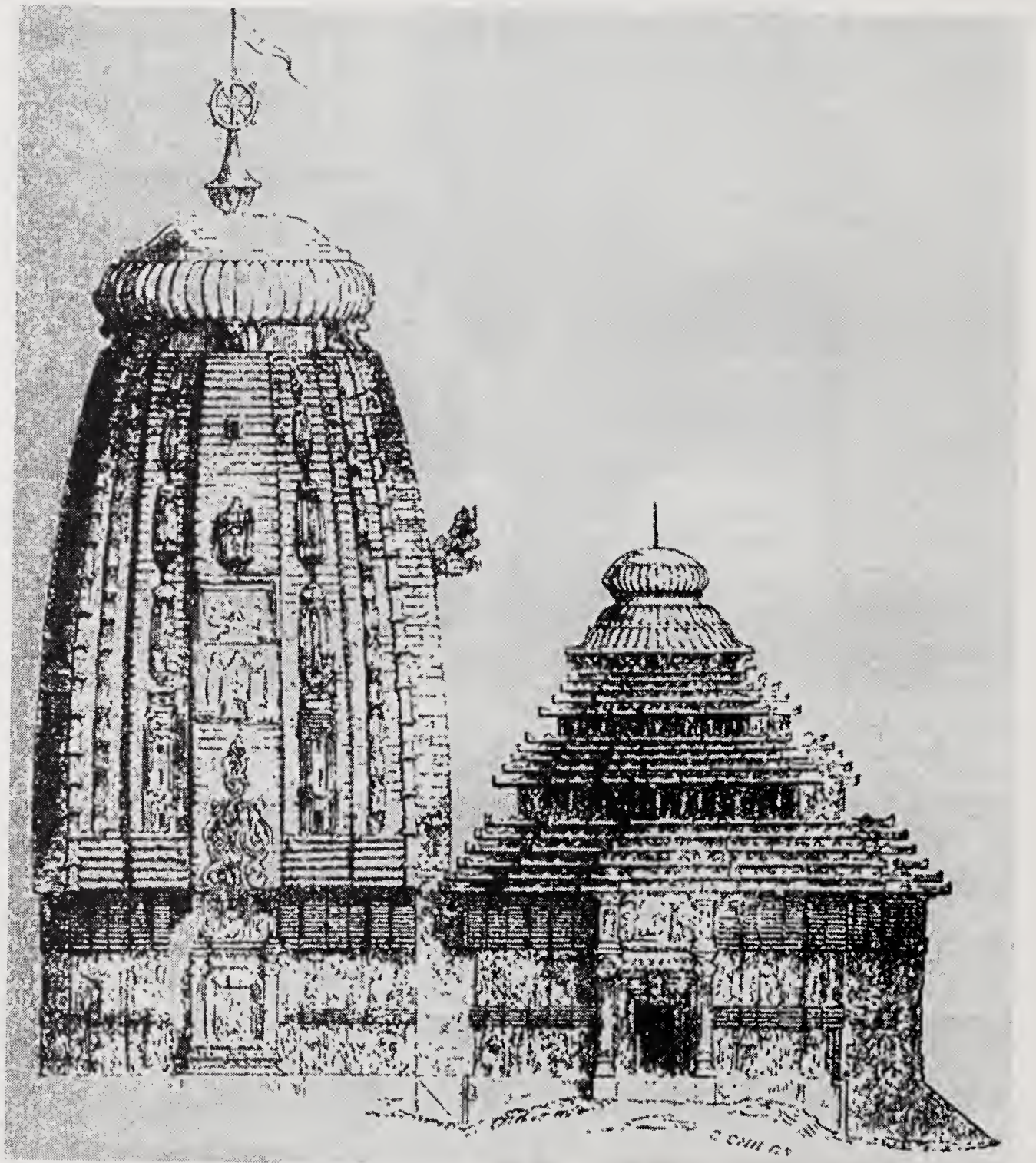
Miniature temple motifs (a) khakhara mundi (b) pidha mundi (c) vajra mundi, (ASI)





Plan of deula with nisa shrines and the jagamohana





Restored elevation of Konark Temple, James Fergusson.



The long brick pedestal in the interior of the deula was empty during clearance. In 1906-07, however, two images representing Balaram and Vishnu were found near the temple. Further, two Parsvadevata images, Varha on the south and Trivikara on the north, were in situ, when the temple was cleared of debris. A broken image of Narasimha has been recovered from the site and this image probably was from the western niche of the temple. Thus there is evidence to suggest that it was a Vaisnava temple. Usually, as at Ananta Vasudeva temple, Bhubaneswar and at Turintura in the Prachi valley, three images of Balaram, Ekanamsa-Subhadra and Visnu enjoyed worship. At Konark two images belonging to the brick temple have been found and the third image of Ekanamsa-Subhadra is missing. It is probable that the brick temple was originally dedicated to Anata Vasudeva Trinity. The column which partly survives in front of the Jagamohan probably represented a Gaurda Stambha. This Vaishnava brick temple may be assigned to the later half of the 13<sup>th</sup> century.

### **Other structures within the compound**

In addition to the main temple complex and subsidiary temples, there were other structures, which are now reduced to their plinths. In keeping with the injunctions of the Vastu Shastras. The kitchen was located in the south east corner. At Lingarajas temple, Bhubaneswar and Jagannath temple, Puri the kitchens are located in the south-east. The remains of the structure at Konark, brought to light after the clearance of the debris, consisted of four wings with an oblong courtyard in the centre. Pillars built of Khondalite end laterite apparently supported the superstructure. The entrance to the kitchen block is provided on the north. The discovery of two stone cisterns for the storage of water, fragments of a khondalite triple oven, confirm that the original structure was a kitchen. There is a well adjoining the kitchen on the north eastern side.

The remains of several mandapas are visible on the north and north eastern side of the jagamohana but their functional



purposes are not clearly known. There is the plinth of a small mandapa, approached by an entrance on the east, which might have been a *snana mandapa*. The Samba Purna prescribes for the construction of a *snana griha* in a Sun temple, and this mandapa apparently served this ritual need. This is evident from the provision of a channel for the clearance of water from the floor of the mandapa. To the east of this mandapa there is a well, the water of which was used for ritual purpose.

To the east of this mandapa, the plinth of a large structure, measuring about 28m in length and about 9m in breadth is found. Its superstructure was apparently supported by pillars, now missing, but their sockets still survive. In addition to the above mentioned structures, there are remains of several pillared-mandapas.

### **The Enclosure**

The tradition of enclosing temples with high walls started in Orissa in the earlier period. The Brahmeswar temple (11<sup>th</sup> century), and Lingaraja (11<sup>th</sup> century) at Bhubaneswar offer such examples. The temple of Lord Jagannath at Puri (12<sup>th</sup> century) has also high enclosure walls. The compound wall of Konark rectangular in plan, measures 261.2m long from east to west and 164.6m from north to the South. The original walls, built of khondalite and laterite stone have been repaired and reconstructed in recent times. The walls were originally quite high and capped by battlements. There is a tradition that these battlements were used in the repair of the enclosure of the Puri temple in the 18<sup>th</sup> century. There are now gateways on the east and south. The main entrance was on the east. Built of khondalite, it was apparently a *pidha* temple, like the eastern gateway of the Lingaraj temple. The superstructure is now missing. The passage leading to the eastern entrance was flanked by a pair of Gaja-Simha, quite small and modest in proportion. The southern gateway presumably had also a pyramidal roof, now missing. Whether there was a third gateway on the north, cannot be determined as no remains of it are available.



# ASPECTS OF ARCHITECTURE AND SCULPTURE

## Architectural Features

The Sun temple of Konark is the greatest temple of Orissa and one of the most notable examples of Orissan architecture at its phase of culmination.

The temple consists of a deula (sanctuary) with a curvilinear sikhara and a jagamohana (porch) covered by a pyramid roof. Both the structures stand on a common plinth 3.9m in height beyond the eastern end, separated by a short distance stands a natamandira (dance hall) on a high platform. The layout of only three structures on east-west axis with natamandira situated at a short distance may be regarded aesthetically more satisfying than the arrangement which joins the four structures i.e. deula, jagamohana, natamandira, bhogamandapa, (refectory) in one axial alignment as at the Jagannatha temple, Puri. The design which combines the four structures makes the plan more lengthy and hampers the independent effect of the structures.

The Sun temple of the Konark is unique as a Sun temple for it has been designed as a great chariot of the Sun god. The common platform for the deula and Jagamohana is decorated with twenty four wheels (2.9m in diameters) and seven horses on the sides of the eastern staircases to transform the temple into a chariot. From the Vedic period, mythology relates that the Sun god moves in Chariot. The *Surya Sataka* of Mayura (7<sup>th</sup> century) composed in honour of Surya, describes the chariot of the Sun god in stanzas 62-72, while stanzas 44-49 are related to the horses that draw his chariot and stanzas 30-61 are in honour of Aruna, the charioteer of Surya. Some scholars believe that the chariot design was inspired by the verses of Mayura. The texts



related to Sun worship, such as the Samba purana and the Bhavisya purana refer to the car festival of the Sun god. In iconography the Sungod is shown in a chariot. Thus the chariot conception of the temple is in keeping with the ancient mythology and the cosmic significance of the Sun's movement in the sky. It speaks of the creative genius and vision of the architects that they gave the mythology a visual form by erecting the temple in the form of a grand chariot. With the Sun god inside the chariot, three static and splendid images of the Sun god as Parsvadevata the mighty chariot is pulled by seven prancing horses. The twenty four wheels symbolise the twenty four fortnights of the year. Each wheel contains eight major spokes, symbolic of eight divisions of the day. The wheel was a symbol of the Sun god, when image was not there. It is symbolic of unity and integration. The ornamented wheels denote time, movement, the cycle of years, months and days. The twenty four weeks represent one year consisting of twelve months. The seven horses are the seven days or seven rays of Savita, the source of all creation. His vehicle is drawn by seven horses for which Sun god is called Saptasva Vahana.

The temple faces east and a careful survey has revealed that the deviation is negligible. The temple was so accurately planned that the first rays of the rising Sun fell on the Sun image enshrined within the main temple. It may be mentioned that in Egypt a temple is dedicated to Sun at Abul Simbel which was built by Pharaoh Ramses. The most remarkable feature of the temple is that it is so precisely oriented that twice a year on Feb. 22 and Oct. 22, the first ray of the morning Sun, passes down the entire length of the temple cave to illuminate the backwall of the innermost shrine, and the Sun god seated there. Possibly the same effect was felt at Konark due to the precise orientation of the temple. The Sun worship, was popular in Egypt, Akhnaton erected the temple of Sun god at Karnak. The place name comes from near by village of the Karnak. Hence name Konark and its design may not be viewed in isolation. The temple of Konark is styled as '*Padma Kesara*' temple in the *Madala Panji*. Lotus is



considered identical with the Sun and when image of the Sun god was not there, lotus represented the Sun god. In the traditional literature Konark is considered as padma tirtha or padma ksetra (sacred land of lotus). Lotus petals formed the predominant decoration of the temple. The temple rises over the padma pristha. The Pancharatha deula with five projections and three side structures virtually makes the temple an *astadala padma* (eight petalled lotus) dedicated in honour of Surya. The temple had a lotus finial (*padmadhvaja*). The monument symbolically conceived as a lotus, was a suitable homage to Surya.

The temple is built of three basic types of stone, laterite, khondalite and chlorite. The laterite has been used in the foundations and in the core. The principal building material is the khondalite, used in the walls. The chlorite was used for doorframe, lintels, simhasan of the presiding deity and for certain important sculptures, such as the images of the Sun god and the images placed in the mundi niches. The Aruna pillar was made of chlorite. The chlorite is durable and does not present problem of decay. Most of the khondalite stone blocks were possibly brought from Naraj area, to take advantage of transportation down the Mahandi, Prachi and the Kusha bhadra. Besides the water way stone blocks were carried along the land-routes. Among the sculptures of Konark, a bullock cart is depicted with blocks of stone. Often heavy stone blocks were dragged along the land route to the temple site. A detached sculpture, now in the Konark Museum, represents the dragging of a huge stone block by several persons.

The constructional technique is based on corbelling. The walls rise by stacking stone blocks one upon the other and then to facilitate the spanning of roof horizontal courses of stone project in such a way as to converge gradually towards the top, forming a hollow pyramid. To impart stability to the walls built on corbelling principles, they adopted the device of tying the opposite walls by means of a number of mudas or ceiling at regular intervals keeping in view the height of the temple. During the work of repair of the Lingaraja and the Jagannatha temple, it has been noticed that the sikhara consists of super imposed chambers, gradually decreasing



in size. The Jagannath temple has a hollow pyramid and its interior consists of super imposed chambers and a similar device was followed in case of the sikhara of Konark temple. The sikhara of the temple has collapsed but, in the back wall of the chamber above the flat ceiling of the antarals or the passage joining the deula with Jagamohana, there are rough steps which provide access to the chamber over the bottom ceiling or garbhamuda of the deula. Internally the plan of deula is astylar, no pillars have been built but the bottom ceiling rested over iron beams. In the Jagamohana, however, four internal pillars, provided additional support to the garbhamuda or the bottom ceiling. The masonry is of the dry order and mortar has not been used. In the joints iron clamps were used to hold stone slabs together in proper position. Another significant aspect of construction of Konark temple is the use of heavy iron beams. These were used to support the false roof and the architraves of the doorways. When Mahmud b. AmirWali from Balkh visited Konark in 1626, he had noticed the iron beams. H.G. Craves noticed as many as 29 beams at Konark, 'the largest one being 35 feet long and 7 to 7 ½ inches square, weight about 6000 lbs. The iron beams have been collected and kept in the compound of the temple. The beams are in excellent conditions and testify to the remarkable metallurgical achievements of the 13<sup>th</sup> century. To manufacture beams measuring 11 metres long with a cross section of about 20 x 22 cm was indeed extraordinary feat unparalleled in the world. It has been established that the mode of manufacturing was responsible for providing protection against corrosion. The puddling process used led to the formation of layer of slag over the surface which was inert to electrochemical action involved in corrosion for which the iron beams are in excellent state of preservation with only a thin coating around it.

The temple is distinguished by certain striking features. Both the deula and jagamohana stand over the majestic platform which rises over a low upaha. This provides a new dimension to the evolution of Orissan temple. Some of the earlier temple including the great Lingaraja temple abruptly rises from the ground, while



others such as Muktesvar, Rajarani have low platform of a few mouldings. The Konark temple, for the first time has a high platform which is in the form of a regular bada of the temple divided into five horizontal divisions, the like of which is not found elsewhere in Orissa.

A notable feature of the plan is the provision for side structures (nisa deula) in front of the persvedevatas. These formed parts of the original architectural scheme and not later additions like those at the Lingaraja. Clustering around the deula on three sides, these added to the strength and balance of the former. The dimension of the bottom part of the deula is comparatively smaller to the soaring sikhara which upsets the equilibrium. These structures lend additional mass to the bottom parts of the temple and help to restore the balance.

The Jagamohana, square in plan, has vertical walls measuring about 30 meter in width and 12 meters in height. As in an Orissan Jagamohana, it is surmounted by a pyramidal roof, divided horizontally into three tiers. The pyramidal roof is about 36 meters across and 18 meters high and is surmounted by a dome piece 13 meters in diameter and 8 meters high. The total height of the jagamohana minus the release is about 39 meters. The pyramidal roof of the Jagamohana marks an improvement over the jagamohana of the Lingaraja where pidhas are arranged in two tiers. Another unique feature of the Jagamohana of Konark is the standing musician sculptures on the terraces above the lowest and middle tiers. At Konark, the individual pidhas are richly carved and judiciously spaced so that the play of light and shade on the roof is particularly charming. Fergusson observes, "There is so far as I know no roof in India where the same play of light and shade is obtained with an equal amount of richness and constructive propriety as in this instance, nor one that sits so gracefully on the base that supports it".

Another interesting feature of architecture is the use of large blocks of stone, neat workmanship, and the manipulative ingenuity of the builder. The monolithic Navagraha slab over the eastern doorway originally weighed 26.67 tons. The massive dome of the



Jagamohana is estimated to weigh not less than 2000 tons and this had to be lifted to a height of nearly 39 meters above the ground. Each of pair of Gajasimha figures placed at the entrance of the jagamohana weighs about 27.48 tons. All these amply demonstrate the technical capacity of the builders.

The temple was the largest architectural enterprise of Orissa: Percy Brown calls it the 'grandest achievement of the eastern school of architecture'. In stupendous form, magnitude of undertaking and elaborate decoration, the temple remains unsurpassed. Fergusson very aptly considered this building as "one of the very best specimen of Indian architecture as an exterior".

Judged as a whole the temple of Konark occupies a unique place as a work of art. In the sixteenth century Abul Fezl remarked, "Even those whose Judgment is critical and who are difficult to please stand astonished at its sight". Sir John Marshall, Director General of Archaeology, in his conservation note Dated Feb. 28, 1905, remarked "There is no monument of Hinduism, which I think is at once so stupendous and so perfectly proportioned as the Black Pagoda, and none which leaves so deep an impression on the memory".

### **Sculptural Features**

The temple of Konark is not only known for its great monumentality of architecture but also for the profusion of its sculptures. Fergusson remarks "... perhaps I do not exaggerate when I say that, it is, for its size, the most richly ornamented building-externally at least in the whole world". The whole of the exterior is covered with sculptures in a scale of unsurpassed magnificence in the realm of Indian art.

"It would be hard to find", observes Coormaraswamy, "anywhere in the world a more perfect example of the adaptation of sculpture to architecture, than is afforded by the temple of the Sun at Konark". This sense of harmony, appropriateness of details, right blending of different part in an integrated artistic composition, immensely add to the total effect and speak of the high aesthetic sensibility of the artists.



The sculpture programme of Konark can be classified into different groups: cult image, human figures, erotic imagery, animal motifs, composite or mythical figures, various architectural, floral vegetable and geometric designs.

### The Cult Images

The Konark temple was dedicated to the Sun god but the presiding deity is, however, missing but the pedestal still exists. According to traditions, the image was removed to the Jagannatha temple, Puri in the 16<sup>th</sup> century.

There are three chlorite images of Surya on the three raha niches of the Surya deula. In the southern niche, the Sun stands in *samapada* on a *saptaratha* chariot. Aruna sits in front of the horses in the left hand and a whip in the right. Surya originally carried a lotus flower in each of his two hands, which are now broken. He wears high boots but is depicted without the coat of mail on the chest. His hair is arranged with a top knot and a short crown also adds much to the effect. He also wears earrings, armlets, a pearl *upavita*, two haras, an elaborate necklace and a highly bejewelled girdle. Near the feet of the deity on his two sides we find two kneeling figures praying to the god with folded hands: the person near the right foot of Surya, with a sword by his side and a short crown on his head, may be taken to be the king. While the person on the proper left of Surya may represent the architect priest. Near the king and the priest, stand respectively the bearded Dandi and the pot bellied Pingala, also bearded, but the attributes in their hands are missing. Beyond them, standing, against a khakhara-mundi, there are two figures decked with high crowns and other ornaments, each carrying a sword in the right hand and shield in the left. There are two female figures, one on each side, shooting arrows, who may represent Usa and Pratyusa or may symbolise the shooting rays of the Sun. above each Khakhara-mundi, there are two female figures, carrying chamara, lotus, incense pot, etc.; the four female figures on both sides possibly represent the four consorts of the Sun-god – Rajni, Suvarna, Chaya and Suvarchasa. The trefoil arch, above is flanked on either side by rows of figures dancing and playing on musical



instruments. At the top corners there are representations of vidyadhara couples, flying with garlands.

The Sun-god of the western niche, carved out of the one chlorite slab, is equally remarkable for its elaborate composition. Here the two hands of the deity are broken, and Aruna has been completely wiped out of existence. To the proper right of Surya are depicted the king, and Dandi. To the left are the priest and Pingala. Beyond them are two attendants holding sword and shield, while Usa and Pratyusa are seen at the extreme ends. Except for the high crown and a slight difference in the treatment of the girdle, the western Surya is similar in size, workmanship and other details to the southern Surya.

The central niche of the northern raha contains the image of the Sun-god riding a horse. This representation is unique in the realm of Indian art not only from the stand point of its superb workmanship but also from the point of view of iconography. The arms and legs of the deity have been mutilated; in fact the head was discovered among the debris, and had now been placed in the proper position. Aruna and the seven horses are conspicuous by their absence. The king and the priest, both standing, attend upon the deity. The two attendant warriors with sword and shield are also depicted. In other details the sculpture closely follows the western and the southern Surya. The deity is considered by some to be Aruna, but in view of the similarity of other details, the rider may possibly be identified with Bhaskara. The *Agnipurana* supports such an identification, for it states that Surya can be represented alone riding a horse.

The Sun images of the south, west and north are often taken to represent the Morning Sun, the Mid-day Sun and the Setting Sun respectively. The *Aditya Hridaya* refers to three forms of the Sun, Brahma in the morning, Siva in the mid-day and Visnu at the time of sunset. The so-called Chayadevi temple and three chlorite images of the Sun-god as parsvadevatas, of which the images of the north and the southern niches are still in situ. The image of the southern niche is without its head and hands. The god stands in samapada. On either side of the deity is a warrior



figure holding sword and shield. In the northern niche Surya is represented as riding on a horse. The two hands together with the attributes, are missing. He wears a high crown, earrings, necklace, upavita, armlet and girdle. The upper body of the god is covered with a coat of mail, his legs are covered with boots and rest on lotus flowers. On either side of the god are armed attendants; above on either side, is depicted a female figure with a *chamara* in her hand.

The unique image of the Sun-god recovered from the Natamandira of Konark is now in the National Museum, New Delhi. The two-armed god stands in the samapada position on a triratha chariot, carved with seven horses, three on the raha flanked by two pilasters and two each on the kanika. The two hands of the deity are broken, but the two lotus flowers he carried in the hands still exist above his shoulders. He wears a bejeweled crown, necklace, earrings, armlets, upavita and bejeweled girdle. His legs are covered with high boots and the *udicya vesa* is elegantly suggested by the coat of mail on the chest. To the proper right of Surya is a bearded Dandi with a staff. Near the left leg is the pot-bellied and bearded Pingala with an inkpot in his left hand, a pen in his right. Beyond them, on either side, is an armed attendant holding sword and shield. Above them there are two female figures. Behind the head of Surya there is a trefoil arch, crowned by a kirttimukha, which lends additional beauty to the composition. It is believed that the image belonged to the earlier Sun temple. A khondalite stone image of Surya is kept in the museum at Konark.

Another chlorite image discovered from the Natamandira represents Vivasvan or a syncretic image Siva Surya. The deity stands on samapada position on a triratha chariot drawn by seven horses. Aruna sits in front and drives the chariot. The god has four hands, the two upper hands are missing, but they evidently carried two lotus flowers that can be seen above his shoulders. He holds a trisula in his lower right while the lower left hand is in the varada pose. The god wears boots, girdle, high crown, necklace and other ornaments. He is flanked on either side by an attendant holding sword and shield.



## Navagraha

The nine grahas were placed over doorways of temples to ward off evil influences. At Konark the planets appear in their fully developed iconography. The Navagraha slab which was originally placed over the eastern doorway of the jagamohana is now kept in a separate shed erected by the Archaeological Department. The monolithic slab is divided into nine pillared pavilions, inside which the nine grahas have been carved. Beginning from the left the grahas are Surya, Soma, Mangala, Budha, Brahaspati, Sukra, Sani, Rahu and Ketu. Except Rahu and Ketu, the planets are seated in padmasana over the padmapitha. Surya, as graharaja, is depicted first, and he holds two lotus flowers in his two hands; his feet do not wear boots. Soma, Mangala, Budha, Brahaspati, Sukra and Sani, each carry a water pot in the left hand and aksamala in the right. Rahu is depicted as a ferocious half-bust figure with a grinning face and protruding eyes. He holds crescent moons in his hands. Ketu is carved with a serpentine lower body and holds a pot from which flames emerge in the left hand; the right hand is mutilated, but, on the analogy of other planet slabs from later temples, it can be said that he held a sword in that hand. All the grahas except Rahu have bejewelled high crowns on their heads. Rahu wears an ornamental tiara and his head is distinguished by the peculiar hairstyle which heightens his ferocious aspect. Brahaspati is distinguished by his flowing beard. Rahu too has beard, which is arranged in ringlet fashion. All the grahas except Rahu wear necklaces of several strands, stylized yajnopavita, kundala in the ears and anklets on the right leg, this ornament being absent in the case of Ketu, who has on the right leg, this ornament being absent in the case of Ketu, who has no legs, Soma, Mangala, Budha, Brahaspati, Sukra and Sani each wear a garland of flowers which reaches to their feet.

The Navagraha slab belonging to the Jagamohana, is the only set which exists at Konark. The fate of the Navagraha slab of the main temple and other slabs of the Jagamohana is not definitely known.



## Dikpalas

The eight dikpalas are conceived as the guardian deities of the eight points of the compass. Beginning with the east they are Indra, Agni, (South-East), Yama (South), Nirrita (South West), Varuna (West), Vayu (North West), Kubera (North) and Isana (North-East). In Orissan temples, the dikpalas are carved in their respective directions.

The dikpalas are depicted in deula, jagamohana and natamandira. The chlorite images of Agni, Yama, Isana etc. have been discovered from the debris. An image of Varunani, the female counter part of Varuna recovered from Konark, is now in the National Museum, New Delhi. This shows that at Konark dikpalas were carved along with their consorts. In the natamandira dikpalas and their consorts appear in the lower and upper jangha respectively.

The Saivite representations at Konark include Sivalinga, seated Siva, Batuka Bhairava riding on a dog, and Nataraja. An image of Ganesa was recovered from a well in the courtyard of the temple. The seated forms of the god could be seen in the natamandira. Representation of Mahisasurmardini, is depicted along with Sivalinga and Jagannatha in three panels.

Vaisnava images representing a four armed Visnu, and Balarama, were recovered from the brick temple. Besides images of Narasimha, Vamana-Trivikrama associated with the Vaisnava brick temple, representation of the avataras of Visnu, such as Varaha, Krisna (as Gopinath and Govardhan dhari and Rama" occur in the sculpture of Konark. There is a unique representation of Purusottam Jagannath in three sculptured panels. The depiction is very significant in the context or the development of the cult and iconography.

## Figure Motifs

The male figures include king, courtiers, attendants, soldiers, dancers, ascetics, labourers, etc., depicted in several situations. Several scenes reflect the cultural conditions of medieval Orissa.

The grace of women has always been a favourite theme in



Indian literature as well as in Indian art, and at Konark the artists took special delight in depicting them in a variety of graceful poses and postures. The loving hand of the artists was particularly fond of carving lovely female figures in eternal youth and often with vivid sensuousness. The best specimens are so sensitively modelled, with such remarkable artistic feeling and loving care, that Coomaraswamy observes that ‘the sculptures of women are frankly the work of lovers’. Even in ruins the temple vibrates with life. The temple walls teem with youthful forms, delicately modelled and cheerfully smiling, they defy decay and mock at time. In the depiction of female forms a few popular types seem to have fascinated the artists.

The “women and the tree motif” or the Salabhanjika (etymologically meaning the woman breaking the Sal bough) has been very popular in Indian art. At Konark we find some excellent specimens of this charming motif. A woman usually stands in a graceful pose under a tree and pulls down a branch which, treated in a stylized manner, looks almost like a creeper. The conception of *dohada*, found in Sanskrit literature, has parallels in some sculptures. The idea that the Ashoka tree blossoms at the touch of the foot of a beautiful damsel is conveyed by sculpture where a young woman places one foot on the tree and seizes its branch, which has blossomed forth at the touch of her foot.

Alasa Kanya : In this representation, the female figures, whether sitting or standing, bend their bodies in glamorous poses or raise their hands in a mood of laziness. Decked with elegant jewelery and with coiffure arranged in several artistic ways, the indolent female figures convey a sense of gay abandon and luxury. The variety of graceful attitudes, gestures and expressions, usual with these figures, afford ample opportunities to the artist to exhibit the grace and elegance of the female form to the fullest extent.

Musician and dancing figures : Ladies shown as playing on musical instruments or dancing to the accompaniment of music, are numerous on the walls of the natamandira. Among the masterpieces of this class, mention must be made of the free standing musician figures on the parapets of the *Jagamohana*,



which are most enchanting creations unparalled in Indian art.

The mother and child motif is another favourite motif of the artists of Konark temple. The mother is depicted with the child in a variety of situations. The mother holds a child in the left or right arm. Often the child is held aloft with both hands and the mother affectionately looks at the child. Sometimes a mother is seen near a half-opened door with a plump child beside her. Often the mother is shown with two or three children. The mother is also shown as walking with her children. In one panel we find the mother with her child being carried in a round dola (*palanquin*).

At Konark, female figures with their pet birds are shown in varied poses and actions. Sometimes the bird is perched on the right shoulder of the lady. It appears as though the lady is talking gently with the bird. In one scene, the bird pecks at the bosom of the lady.

The toilet of the ladies provided a charming field for the artists to depict them in several graceful forms. The woman is shown as dressing her hair or is engaged in fixing her ear tops or removing the anklet from her leg. Sometimes the lady looks to the mirror to adjust the *simanta* or to put on vermillion, or simply to review her beauty. At times she is represented as wringing water from her long tresses while a *hamsa* looks on at her feet.

### **Animal Motifs**

In Konark sculpture, animal figures constitute by far the most common theme of decoration, and Coomaraswamy points out, "It is perhaps the animals that are most impressive. The elephant friezes on the upana or the two colossal elephants on the north courtyard have no counterpart in any other temple of Orissa. Of the gigantic pairs in the northern courtyard, one holds a man in its trunk, while another is shown with a man under its body. Both elephants, impress us by their dignified bearing, and largeness of volume. The stone elephant of Konark holding a man in the trunk is imitated at a later time in a Roman Villa. The elephant friezes on the upana, executed with loving care by many hands, present



a charming spectacle. The realistic treatment of their form shows the meticulous care bestowed on the study of their anatomy. Elephants are carved in a number of poses; they move in processions, carry their masters, trot in the jungle, sit, recline or go to the water to quench their thirst. The whole of the kheda operation has been shown. The elephants are shown in a herd in the jungle. The jungle atmosphere is suggested by a lion in a foil or a peacock as in the upana below a wheel. The elephants are led into the kheda by the beating of drums and the sound of trumpets. The sculptures show wild elephants approaching the empty kheda, some friezes depict them inside the kheda; often the enraged elephants in the kheda are subdued by long bamboo poles. In several panels, the elephants are caught by nooses; persons are shown engaged in putting the noose around the neck of the elephant from above a tree and other persons are trying to fasten the legs with ropes. According to elephant lore, the eight elephants of the quarters were created out of the shell of the cosmic egg from which the Sun-god was created. Judged against this background, the depiction of elephant reliefs and placing them as guardian animals, were in keeping with the mythology.

The horses are carved in the context of military scene or in the religious context. Of these, the seven horses that once adorned the eastern entrance are in broken fragments, but even in this state of ruin the fragments speak for themselves. In the strenuous task of drawing the gigantic chariot, they are considered by Coomaraswamy to “express a mood of sadness almost as profound as that of the Javanse Mahisamardini”. The horse is specially associated with the Sun-god and his son Revanta. The Sun god on the north raha rides on a horse and seven horses constitute an inseparable part of the Sun god’s chariot. The splendid war horses are characterized by a strength and dynamic vitality which lends them a monumental grandeur. Commenting on one of them, Havell remarks, “Had it by chance been labelled ‘Roman’ or ‘Greek’, this magnificent work of art would now be the pride of some great metropolitan museum in Europe and America. Here Indian sculptors have shown that they can express



with as much fire and passion as the greatest European art, the pride of victory and the glory of triumphant warfare; for not even the Homeric grandeur of the Elgin marbles surpasses the magnificent movement and modelling of the Indian Achilles, and the superbly monumental war horse in its massive strength and vigour is not unworthy of comparison with Verochhio's famous masterpiece in Venice".

Among other animals, giraffe, camel, deer, tiger, boar, ram, monkey, bullock, etc. are represented in the context of different scenes. A giraffe is depicted in a panel on the upper jangha portion of the pitha wall of the temple on the south, and this is probably the solitary example of this alien animal in Indian temple art. How did it get to Orissa? Brought as a curiosity by Arab traders and sold to the king, perhaps the presence of the giraffe is an important evidence of commercial contact with East Africa. The depiction of camels on the Orissan temples is very rare, the animal being not normally found in this part of India. However, there are a few representation of the camel in Konark art. Tiger and boar appear in hunting scenes, while deer is shown in several postures and positions in the scrolls, besides being depicted in the hunting scene.

### **Birds**

The birds represented in the temple art include peacock, pigeon, goose, parrot, crane, etc. In the conventional kadamba tree which serves as a background for the "Giraffe scene", as many as five peacocks are shown perched on its branches. The parrot was kept as a pet bird by ladies, and even a lady going for worship carries a parrot on her shoulder; pigeon and crane are depicted in the roof of the jagamohana, on the edges of its cornices. Two birds placed on the roof line of decorative mandapa, is a familiar motif at Konark. On the walls of Konark, rows of geese, admirably carved in a continuous line, looking forward, backward and downward as they move, create a charming spectacle. Such representaton is seen at its best in the pitha-wall of the natamandira on the baranda-mouldings. Many of these geese are, however, are shown with stylised and flowry tails.



## Conventional and composite Animals

The lion (simha) formed a popular item of decoration from a very early period. At Konark, the motif is impressive not only for its bold and imaginative treatment but also for its pleasing variety. The artists were fully aware of the structural significance of the iron motif, and utilised it in its *dopichha* form with one head and two bodies placed at right angles to support the ponderous crowning elements. Miniature representations of this form are, however, seen on the roof of the decorative pillared pavilions, where two such lions, separated by a kalasa, face opposite directions.

At Konark, a variety of *vyala* (locally called *vidala*) figures are found on the platform of the temple, as well as on the *Vimana* and the *Jagamohana*. They are also shown on the interior pillars of the *natamandira*. The *Aparajita pricha* of Bhuvanadeva (12<sup>th</sup> Century A.D.) mentions sixteen types of *vyalas*, such as lion, elephant, horse, man, bull, ram, parrot, boar, buffalo, rat, insect, monkey, gander, cock, peacock and snake forms. At Konark a few of these types such as *simha vyala*, *nara vyala* etc. are found. *Gaja-vyala*s are seen in large numbers. It is an imaginative combination of lion and the elephant; the body, tail and paws are those of the lion but the face is of that the elephant. It stands on its hind legs, resting one leg on the waist and another leg on the head of a prostrate warrior who has sword and shield in his hands. The elephant face carries a man in the trunk which completes the composite pattern. The *nara-vyala* is unique product of medieval Orissan art and has not been noticed in other parts of India. In this form, the lion is combined with a human face. The *asva-vyala* is shown over the elephant. It carries a rider on the back. The basic appearance is that a lion, but its rider and the bridle suggest that it is an *asva-vyala*. The motif of a warrior riding *asva-vyala* and trampling an elephant with rider as depicted the junction wall of the *deula* and *jagamohan* is monumental in scale and represents an imaginative development of the motif.

The *Gaja-Simha* or the lion on a recumbent elephant motif is quite popular at Konark. Various explanations are given to explain this motif.



It is believed that the pattern of “the lion vanquishing the elephant” symbolises “the conquest of spiritual power over worldly power”. To another scholar it was the “symbol of ignorance conquered by knowledge”. Benjamin Rowland thinks that these “possibly are allegories of the Sun’s (lion’s) triumph over the rain (elephant)”. It is also argued that the motif represents victory of Hinduism over Buddhism, the lion being fancifully taken to be the symbol of the former and the elephant of the latter. This theory is however, improbable in view of its use by the Buddhist image makers themselves, which shows that the motif had probably ornamental and not religious significance. The explanation that “the rampant lion on crouching elephant” permanently embodies a political change in Orissa. The Kesari dynasty (9<sup>th</sup>-11<sup>th</sup> century) overthrowing the Gajapati dynasty (1435-1540) is equally improbable in view of the chronological position of the dynasties in Orissan history, and the occurrence of this motif outside Orissa.

Literature and long tradition relate that the skull of the elephant contains a special kind of pearl. Therefore the lion takes a special delight in attacking the elephant with its claws to collect this pearl. The epithet “gajaraja” (lord of elephants) applied to the lion in literature shows its relationship with the elephant. To attack elephants is a part of his intrinsic nature, even from the time of its birth.

The “lion standing on elephant” motif merely reflects this inalienable habit of the lion. The notion that the lion is the deadly enemy of the elephant and that the latter possesses a king of pearl in its head is to be found in the *Raghuvansa* of Kalidasa and in the inscriptions of Bhauma and Ganga period. The Dhenkanal plate of Tribhuvana Mahadevi mentions that her ancestors “like lions with fierce claws, crushed the elephant like formidable enemies”.

In one type the lion is shown over a couchant elephant. The gigantic pair in front of the eastern entrance of the natamandira,



is the best example of this type. The lion with open mouth, lolling tongue, flamboyant mane and protruding eyes stands just over the recumbent elephant with lifted paws in an attitude of striking the latter, which in its turn also holds a man in the trunk. The majesty, vigour and strength of the stylised lions and the mood of helplessness of the elephants, are well brought out by the sculptor.

The double gaja-simha motif is used at the bottom of pilasters with great skill and imagination, sometimes the lions face one another with uplifted paws.

The variety, locally known dopichha gajasimha, shows the two lioness with only one common head. In another type the stylised lion stands over the elephant on its hind legs, placing one leg on the head and other on the rear part of the elephant.

The *makara* in its mythical and stylised form, with a plump body and twisted proboscis, is found as the vehicle of goddess Ganga and *makara* serving as a gargoyle on the north of the Chayadevi temple is very impressive, and holds a fish in its open mouth.

The Kirtimukha or face of the frame represents a stylised lion's face with fanciful horns, bulging round eyes, upper jaws and absence of the chin, which creates a terrific countenance. The face is taken to represent that of Rahu, and when pearl strings are emitted from its mouth it has a typical Orissan name in *Rahumukharamala*. According to Dr. Panigrahi, "It is a symbolical representation of the builder's or donor's frame which is figuratively taken to be as white as pearls".

At Konark the kirttimukha design consists of the head of a vyala with strings of pearls issuing from its mouth though in some cases kirttimukhas merely represent the grotesque head of a lion with no pearl strings. In the natamandira a series of kirttimukha designs are carved on the upper half of the pillars, with pearl strings hanging from them. But the most popular, and perhaps the



most charming, use of this motif is with the *makara torana* and the chaitya-windows, the two most familiar features in the repertoire of decoration of the time. On the upana of the temple, we find a series of chaitya-window at regular intervals which are crowned by kirttimukhas. The chaitya-window often has a lotus finial, but in most cases it is crowned by the kirttimukha.

The decorative arches, sometimes having makara-mouths at the points of springing, are usually crowned by the "face of glory". Many examples of this combined motif integrating both the makara and the kirttimukha in a torana, may be seen at Konark.

At Konark the serpent pillars are shown with Naga and Nagi either single or in embrace (Naga bandha). The Naga and Nagakanya figures are carved on the pitha of the temple in the portion of the lower jangha. The bada of the Jagamohana is also decorated with Naga and Nagi pillars, having double gaja-vidalas at the base.

The proverbial beauty of the Nagakanyas inspired the artists to depict them in lovely forms and in pleasing variety. Decked in rich jewellery, with charming hairstyles or bejeweled crowns on their heads, their treatment is varied: they play on different musical instruments such as the vina, flute and the mrdanga, carry garlands, or join their palms in adoration to the god. The type showing the Naga and the Nagini in close embrace, invariably has a sweet expression on the faces. The coils of the two are elegantly entwined to form a Naga mithuna bandha.

The Naga and Nagakanya figures were used to beautify and to emphasize the auspicious character of the temples. C.F. Oldham asserts that worship of the Sun and the serpent was closely interlinked and was once a universal phenomenon in the ancient world. In ancient Orissa serpent worship was fairly popular and Brahmans of the Maitriyaniya school were specially engaged for the purpose of their puja. In the Santiparvan of the *Mahabharata* mention is made of the Naga Padmanabha drawing the one-wheeled chariot of the Sun-god. The *Visnu Purana* says that the twelve Nagas attended the chariot of the Sun by turns, along with the Risis, Gandharvas, Apsaras, and others. But it is difficult



to attribute any sectarian significance to this decoration, which forms a very conspicuous feature of the decorative devices of temples bearing different religious affiliations.

Among other semi-divine figures mention may be made of Yaksas, Gandharvas and Kinnaras. The Gandharvas are celestial musicians. They are shown as flying in the air with their female counter parts and carrying musical instruments with which to serve the deity.

### **Decorative Designs**

The flower ornaments also have a place in the decoration of the temple. At Konark, of all flowers, lotus is depicted in great number and with great elegance – petals, buds and full flowers. Elaborated lotus pedestals are used for divinities. An elegant lotus design even formed the ceiling of the natamandira.

The scroll-work offered a good field for the artists to show their skill and individual talent. At Konark the creeper and foliage patterns are usually used as the background. The scroll is known as dali or lata in the local language. In this field the Orissan artists made a distinct contribution by evolving a number of new artistic types. The scroll is not exclusively Orissan but as Stella Kramrisch points out, “It found its richest soil in Orissa particularly in the latter phases of this school, where its devices effect a final transmutation of the grain of the stone into the plastic texture of the temple wall”. The local artists coined special names to denote the varieties of this motif, phula-lata, patralata, vana-lata, etc.

Sometimes as the creeper rolls on, it creates circles. Inside these circles, heads of animals or full figures of animals are carved with minute precision. The animals include elephant, boar, monkey, lion, deer, etc., Sometimes more than one animal is placed within the circle, which must have demanded endless care and patience to carve them in such an excellent form. The treatment of the foils are made according to the imagination of the artists. In some cases, we find small figure of lions fighting with elephants. In one interesting specimen a tiger is shown approaching a deer, while in another foil we find a monkey sitting over a crocodile. Birds are also used as insets. When the creeper scrolls carry



birds they are known as paksi-lata; with insets of wild animals (vana-jivas) it is called jiva-lata. Often a nice effect is produced by combining foliage with animals, birds etc. in one decorative composition.

**Miniature temple motif:** The architectural designs form an important element of decoration. When a niche is surmounted by pidha type of temples, it is called pidha-mundi; when it is provided with a crowning structure of khakhara type, it is called khakhara-mundi. Sometimes, it may be capped by an interlacing chaitya-window pattern, which is called the vajra-mundi.

**Gavaksa motif:** The gavaksa or the window motif frequently occurs at Konark, as in other temples of Orissa and elsewhere in India.

At Konark, chaitya-window motifs are varied in treatment and mark the final stage of evolution. The arch pattern of the earlier epoch has been converted into a full circle or medallion of concentric circles and the side wings have been replaced by arabesque like flourishes on the sides. The motif is usually capped by a kirtimukha or a lotus flower. We notice changes in the reclining figures; sometimes musicians, ganas, kinnaras, parrots etc. flank the pattern. The medallion in its innermost concentric circle also carries a lotus flower, human head or lion's face. Often a bell hangs from the mouth of the kirttimukha. Sometimes two chaitya-windows are placed one upon the other; at times a complex pattern is obtained by interlacing a number of windows, of which we have excellent specimens on the natamandira.

### **Erotic Imagery**

The erotic sculptures have earned fame or even notoriety, for Konark. G.F. Cockburn, a Commissioner of Orissa rejoiced at the dilapidation of the temple and wrote in 1858, "The beastly representations with which it is covered make it, I think very desirable, that the whole of the remaining building should be levelled with the ground". Lowell Thomas described Konark as the "most beautiful" and at the same time "the most obscene building in the world". C.S. Ross Smith writes, "Written and spoken there is no end to the list of explanations to the mithuna's beautiful,



mysterious, and unique presence of these sacred walls". Various interpretations of those sculptures have been suggested. In a maze of explanations scholars have rarely been successful in making the problem more intelligible. The failure, we believe, is largely due to the fact that too much emphasis has been given on finding a "single cause" or a complete explanation.

Benjamin Rowland in *The Art and Architecture of India* has suggested that "at Konark the function of these endlessly repeated pairs in dalliance must have had something to do with actual orgiastic rites conducted in association with a special cult of the Sun as a universal fructifying force". Percy Brown goes a step further when he asserts that "in Orissa at this period the maithuna movement appears to have obtained a firm hold on a considerable section of the community". He believed that the "temple was erected no such a remote site in order that the practices so wantonly illustrated might be ceremoniously conducted by its addicts in an underworld of their own". It is difficult to agree with Percy Brown in his attempt to explain the erotic sculptures in terms of a "maithuna movement". The Ksetra mahatmya of Konark to be found in the Sanskrit texts, shows that, as an important tirtha in the Hindu world, the place was frequented by pilgrims and was not meant to be an "underworld" for sex addicts. The Ganga epoch, in which the Konark temple was built, was followed by yet another brilliant epoch under the Suryavamsi Gajapati kings of Orissa and no "deplorable effects" could be detected because of such sculptures. There is nothing to prove that "orgiastic rites" constituted an important element in the Sun-worship at Konark.

H. Goetz held that the "very outspoken sexual sculptures" were "connected with the many dancing girls once dedicated to the Sun temples". P. Rawson suggested that the erotic sculptures "merely served the mundane purpose of advertising the charms of the *devadasis* or temple prostitutes". These opinions are open to dispute, as erotic sculptures are not generally found on the natamandira. The *devadasis* were the attendants of the god and were not meant for the pleasure of the people, though at times a



deviation was made from this ideal. The profusion of erotic sculptures at Konark need not imply the moral laxity of the devadasis, who were primarily concerned with service to the deity.

It is often held that the purpose of carving erotic sculptures was mainly symbolic. A.K. Coomaraswamy observes, “The Indian sex-symbolism assumes two main forms, the recognition of which will assist the student of art; first the desire and union of individuals, sacramental in its likeness to the union of the individual soul with god – this is the love of the herd girls for Krishna : and second, the creation of the world, manifestation, lila, as the fruit of the union of male and female cosmic principles – purusha and shakti”. The representation of sexual union in sculptures according to Stella Kramrisch, is regarded as a “symbol of moksa” because the ecstasy in sexual love was compared to the religious ecstasy derived in the merging of the human soul with the ultimate reality. This philosophy finds expression in the *Brhadaranyaka Upanisad* which declares: “As a man, fully embraced by his beloved wife, does not know anything at all, either external or internal, so does this Being (self), fully embraced by the Supreme Self, not know anything at all, either external or internal”.

Coomaraswamy attributed the erotic sculptures to the “quickenning power of the Sun”, but as such sculptures are not the monopoly of the Sun-temple of Konark, he also pointed out that the obscene figures on the exterior walls of the monument symbolize the illusory world of pleasure in contrast to the solemn character of the inner side of the sanctuary. The out side of the temple represents various activities that belong to the Samsara, beyond that and within the temple is the image of god. The worshiper must overcome the world of pleasure to find his god. The Sipur stone inscription of the time of Mahasiva Gupta exhorts : “Oh kings, do not turn your minds to sin seeing what has been clearly described of this wonderful world (samsara) under the guise of the temple (i.e.) the diversity of acts of all creatures high and low-with cage like bodies (passing) through various stages of existence from the celestial being (down wards).

Their depiction appears to be deliberate: their purpose is to



awaken a feeling of aversion for the earthly life for which they stand and lead the devotees to the calm atmosphere of the abode of the god.

K.C. Panigrahi, believes that obscene figures were in all probability meant to test the self-restraint of a visitor before he was entitled to reap the merits of his visit to the god". A real devotee can look unmoved at these emotional scenes, or his mind will be filled with disgust, he will enter the temple to seek salvation. A person without passion is an ideal person to attain salvation. In the Puranas we hear of beautiful apsaras who are sent to disturb the meditation of risis. The real saints were those who could concentrate in spite of such attractions. Marco Polo (C.1293 A.D.) also tells how temple girls were utilised to test the moral purity of the naked ascetics before they were admitted to the order. Many of the erotic panels at Konark show bearded ascetics in the company of lovely damsels, forgetting their austere asceticism, such panels may be meant to ridicule the passionate ascetics.

It is generally believed that the erotic sculptures are inspired by Tantric rituals which emphasize sensual elements as a means to salvation. The Tantric mode of worship, among others, recommends the use of maithuna (sexual intercourse). But all the erotic sculpture of Konark cannot be explained as representing Tantric rites. The Chausat Yogini temples at Hirapur and Ranipur Jharial contain no sculpture depicting sexual rites, although, beyond any doubt, these two places were connected with tantric Saktism. The erotic sculptures do not appear in profusion on temples erected during the heyday of the Tantricism, while during the period of its decline these are seen on almost all the temples of Orissa. In the thirteenth century, when the Konark temple was erected, the form of worship was greatly influenced by the spread of Vaisnavism. The Trantic mode of worship no doubt continued, but it was mainly connected with yantras, mandalas, performance of *nyasas*, *mudras* and uttering of mantras in which letters had Tantric symbolism.

Another answer often given is that the erotic sculptures are meant to ward off lightning and thunder. The *Skandapurana*



seems to suggest that such sculptures, are depicted as a prophylactic measure against thunderbolts.

The *Bhagavata purana* tells a story that once, Indra being guilty of the sin of brahmanicide, distributed his sin among the earth, water, trees and women. Through sharing the sin of Indra, women became passionate and indulged in sexual pleasures. So it is believed that the Vajra of Indra cannot affect the temple where the love play is depicted in sculpture. Even if one admit such superstitious beliefs it is difficult to explain the abundance of such sculptures. If these obscene sculptures were intended to ward off lightning and thunder, they would have been carved on the upper part of the temple but in fact, they are not to be seen on the *mastaka* portion.

The practice of carving erotic sculptures seems to have been sanctioned by texts dealing with architecture. The *Brhatsamhita* of Varahamihira recommends that the doorjambs of temples should be decorated with auspicious birds (*mangalya vihaga*), auspicious trees (*srivrksha*), full vessels (*ghata*), foliage (*patravali*), and amorous couples (*mithuna*). The *Agni Purana* enjoins that doorways should be embellished with *mithunas* (*mithanair bibhusayed*). These injunctions, have been followed in the decoration of the doorjambs of the Konark temple. Sarala Dasa (15<sup>th</sup> century A.D.) in his *Oriya Mahabharata* alludes to the injunctions of the *Agni-purana* for which in the Chandrabhaga tirtha, everything, including the *Bhaskara purana* has become obscene and there on the temple wall all the obscene episodes from the 18 *Puranas* have been told (carved) before the Sun-god. The artists of Konark seems to have followed the ancient custom and tradition.

In religion sex played an important role. In the *Rigveda* the cosmic desire is said to have been at the root of the creation. In the *Brhadaranyaka Upanisad* it is said that in the beginning the Primeval Person was alone and longing for companionship, he produced a wife by dividing himself. The significance of *mithuna* as a source of creation is more clearly set forth in the following passage of the *Brhadaranyaka Upanishad*. "He was not at all



happy. Therefore people (still) are not happy when alone. He desired a mate. He became as big as man and wife embracing each other. He parted this very body into two. From that came husband and wife. Therefore, said Yagnavalkya, this body is one-half of oneself, like one of the two halves of a spilt pea. Therefore this space is indeed filled by the wife. He was united with her. From that men were born. She became a cow, the other became a bull and was united with her, from that cows were born. Thus did he project everything that exists in pairs, down to the ants. The *satapatha Brahman* contains the statement that “birth originates from a mithuna”. *Mithuna* is defined as a “productive couple”. “A mate is one-half of one’s own self for when one is with a mate he is whole and complete”. This type of thinking is also to be found in the religious literature of subsequent epoch. The sankhya philosophy puts emphasis on the concept of Purusa and Prakriti. The Lakulisa Pasupata sects of Saivas had among the vidhis or rules of conduct, *srngarana* which implied exhibiting amorous gestures at the sight of a woman. The Kaula-Kapaliaka and Kalamukha sects were two extreme shoots of the Pasupat school and ascetics belonging to those schools observed rites which are far more outlandish in character. Some of the sculptures of Bhubaneswar temples were influenced by such religious practices.

The erotic sculptures had a legitimate place on the temple walls, just as love and sex have a legitimate place in life. Commenting on the erotic sculptures, Ananda Coomaraswamy observes. “They appear in Indian temple sculpture, now rarely, now frequently, simply because voluptuous ecstasy has also its due place in life, and those who interpreted life were artists. To them such figures appeared appropriate equally for the happiness they represented and for their deeper symbolism”. The erotic sculptures of Konark reflect the life and vitality of the times; they are the expressions of a happy people who took delight in pursuit of pleasure.

The art is connected with society and culture of the time. Inscriptions of medieval Orissa often mention amorous activities of upper classes especially of the royal family. The erotic sculpture,



however, depict, among others, one aspect of that life.

One notable feature of the erotic sculptures of Konark is their total frankness. Nihar Ranjan Ray aptly remarks; “what is remarkable at Konark...is the fact that even in those scenes that depict a sexual act there is a sort of delightful detachment in the actors themselves. They take it so easy and in such a nonchalant manner that there is not the slightest suggestion of a mischief being done or a shameful act being gone through”.

Another feature peculiar to the erotic sculpture of Konark is the “mutuality of enjoyment” and the “intense humanism” of the scenes. Referring to these aspects Marie Seton observes. “There is something very extraordinary about the erotic art of Konark and that is that though there never could be greater realism, there is not a single scene where a man touches a woman against her will. Not one scene remotely suggests the idea of rape. Even the scenes which can be called orgiastic are by mutual consent. In consequence there is an expression of intense joy unbroken by violence between men and women... Konark makes all the other erotic art of the world appear grotesquely lewd and pornographic”. This “expression of intense joy and zest in life, are something unique to Konark. Coomaraswamy observes, “it is a hymn to life, a frank and exquisite glorification of creative force in the universe”. Abanindranath Tagore considers Konark, “a merry mart of eternal youth”.

There is no single explanation for the erotic sculptures. They made their appearance and continued as decorations on the walls of Indian temples through a combination of factors, notions about their auspicious character, influence of Tantrism, *kamasastra* literature, superstitions, canonical injunctions, long standing convention, and especially the inherent human weakness for earthly pleasures. Symbolic or mere ornamentation, meaningful or purposeless, such sculptures are in profusion which may be due to the fertilising or stimulating power of the Sun god.

### **Characteristics of Konark Sculptures**

The Konark sculptures, representing the climax of a process, possess all the peculiar features of medieval Orissan art. Profusion,



almost a strong prediction for dense decoration, is the keynote of this plastic art. A maximum of decorative devices have been compressed into the minimum of space, in complete contrast to the earlier emphasis on simplicity, modesty, balance and restraint, features to be noticed in the elegant embellishments of the Rajarani or the Lingaraja temple.

The contradictory qualities of the sculpture are evident in the blending of different scenes of war, worship, love, ferocity and the like, in an attempt to appeal to the senses, heart and the mind. The artist who depicted the coquettish languor on the face of the erotic couples, and the voluptuous beauty of the naked bodies, could also show the spiritual grace on the face of the Sun god. In fact here at Konark can be seen magical mixture of opposites, stupendous size made majestic by richness and delicacy of decorative details, spiritual grace side by side with debasing sensuality and display of light and darkness side by side.

At Khajuraho the sculptures being independent of the flat base of the temple body, seem as though they have been applied on the temple surface, without any basic relationship with the temple walls. But at Konark, as in the case of other temples of Orissa the figure sculptures look as if they have blossomed forth from the temple wall. This organic relationship between the sculpture and the walls of the temple, contribute, to a very considerable degree, to the vitality and liveliness of the Orissan sculptures”.

Coomaraswamy observes, “the best Konark figures are characterised by an exquisite smoothness and vitality”. The preference for massive body with more soundness of features is an important feature of Konark. The artist delights in revealing the beauty of form to the fullest extent, by modelling the human figures with the highest feeling and sensitiveness. The female figures adorning the parapets of the *Jagamohana* are endowed with an exquisite grace and elegance that justly give them a permanent place in the history of art. The beauty of the different parts of the body, the tenderness of the flesh, the sweet expression of the eyes, the charm of the sensitive lips are well brought out



by the superb modelling.

Many of the sculptures are infused with a dynamic vitality and possess a unique charm of their own. In the eloquent words of Abanindra Tagore, “Here nothing is silent, nothing is motionless, nothing is barren or sterile. Stones are ringing with deep resonance of the Mridanga-drum, stones are running like frisky spirited horses pulling the car at the top speed; fertile stones have bloomed out like the ever blooming plants of the bowers, embracing in their thousand arms of shining green from all quarters”.

A great many of the sculpture depict the society and the age to which they belong. The observation of Rabindranath Tagore with regard to the Bhubaneswar temples is also true in respect of Konark: “The great and little deeds of man, the good and evil occurrences of his daily life, his work and play, his war and peace, his home and the world, cover up the whole temple, through a series of wonderful pictures”. Here, on the walls of Konark, can be seen the king with all the regal paraphernalia, soldiers on the march, common labourers carrying loads or dragging stone, a host of gay people indulging in the legitimate pleasures of life, ascetics, dancers, hunters, and musicians along with many of the fauna and flora of India; here in fact may be found the depiction of life style of the people on the hard surface of stone.

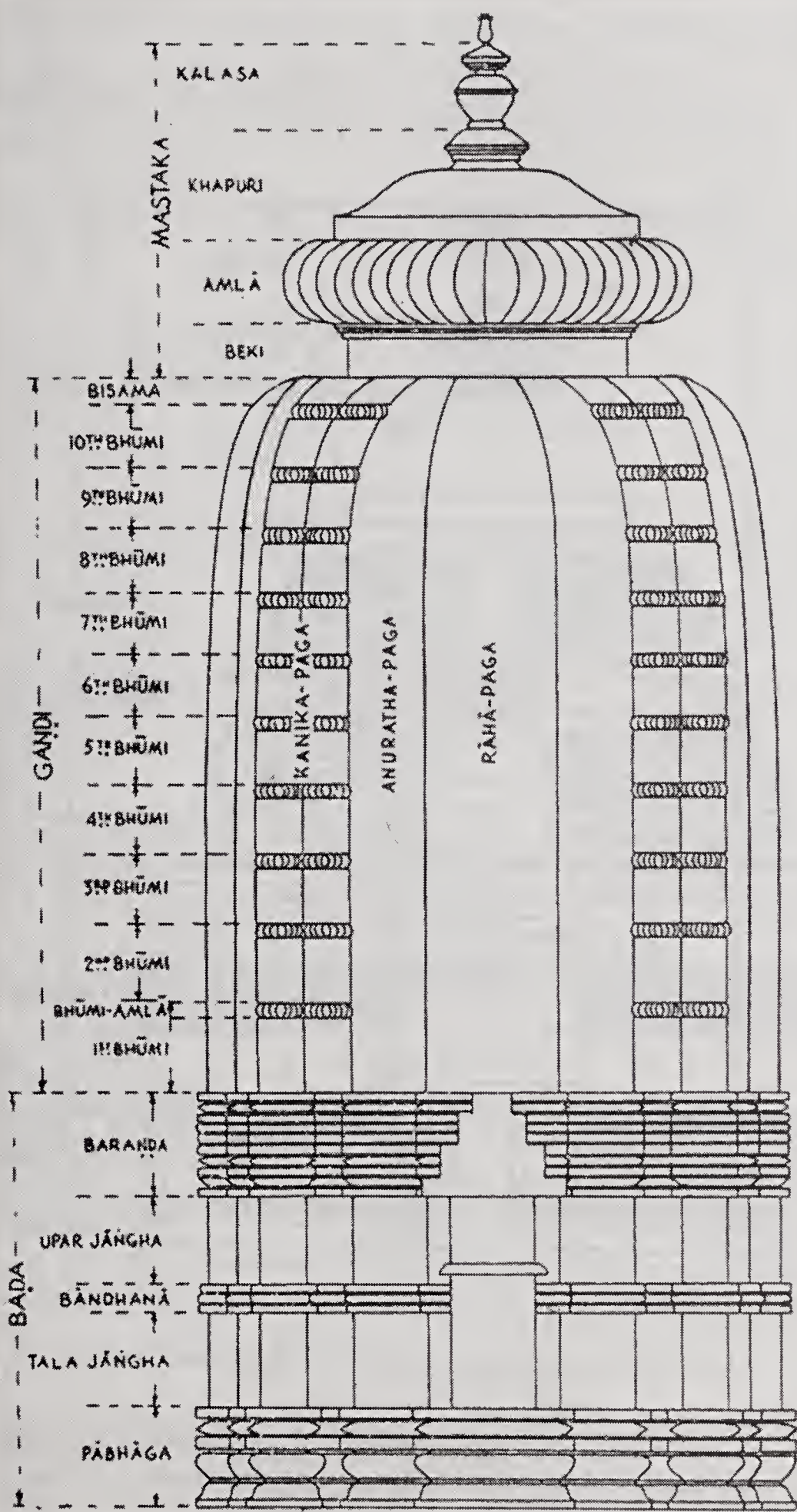


# THE FALL OF THE TEMPLE AND CONSERVATION

In the 19<sup>th</sup> century earlier, scholars such as Andrew Stirling and James Fergusson, who saw a fragment of the main temple, never entertained any doubt regarding the completion of the building. But after collapse of the temple and judging from the vast debris with which it was covered, some scholars believed that the temple was never completed and nor was any image placed within it. M.H. Arnott thought that the temple was constructed on a heap of sand and the temple collapsed immediately after completion as the sand was removed from the interior. He was under the impression that the “Weight above was not great enough to resist the inward tendency of the corbelling to fall in”.

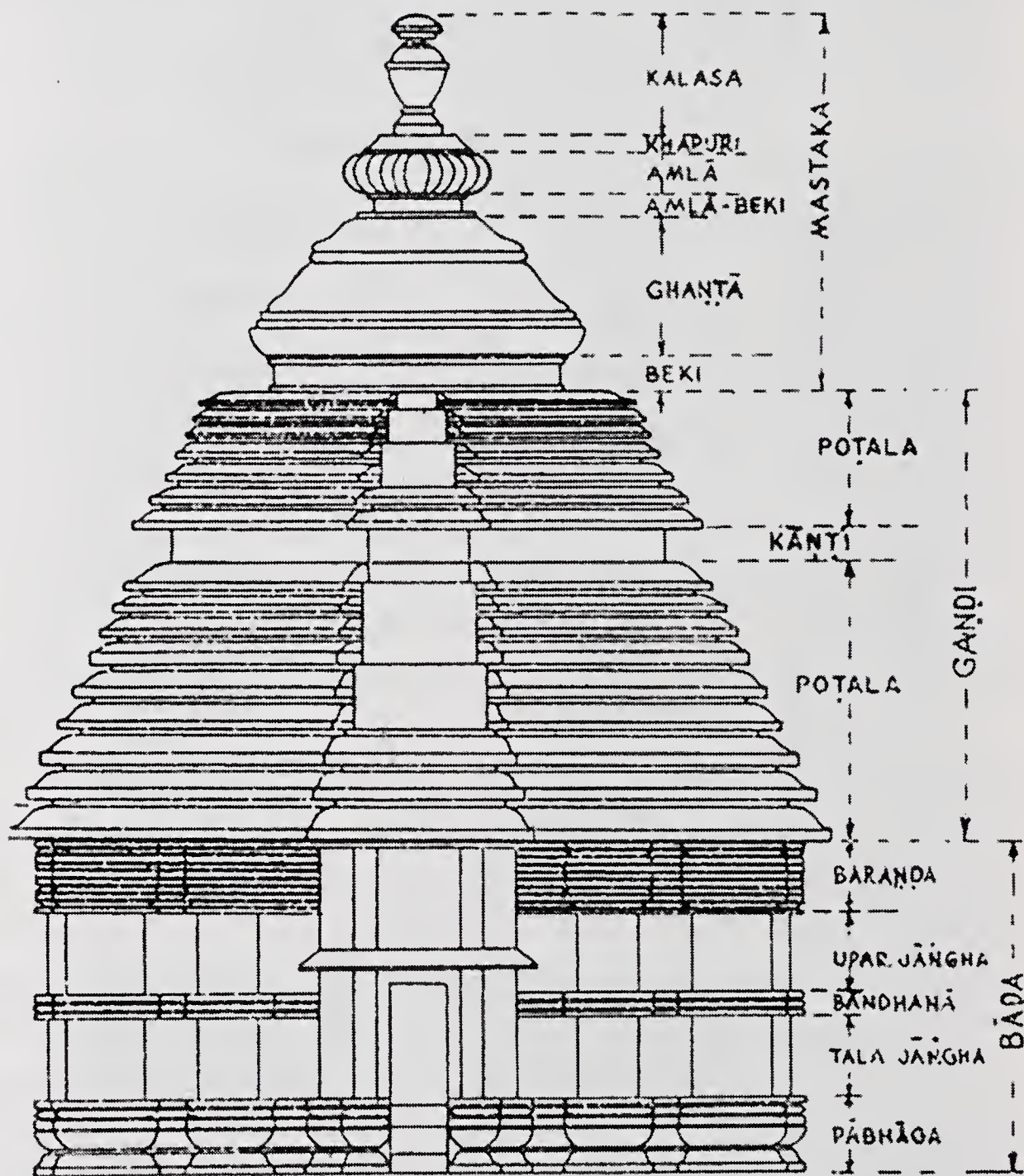
Percy Brown asserted that the temple collapsed even before its completion. ‘There are fairly clear proofs that it was never quite completed as before the ponderous stones that formed the portion of the tower, could be put into position, the foundation began to give way’. Some of the large sculptures blocked intended for the summit lie at the foot not only unbroken but unbruised, whereas had they fallen from such a height they could not fail to show signs of serious damage or fracture. The conception of the temple was that of genius, but its colossal grandeur outstripped the means of execution, for its materialisation was beyond the capacity of its builders, its scale was too great for their powers, and in the construction part they failed. It was, however, a magnificent failure”. The examination of the monument at different periods has revealed that its foundations were stable, Konark is considered the culmination of a long evolution of temple building activities in Orissa. Hence, they cannot be blamed for any faulty construction. Many of the large sculptures, have survived in





Principal components of a Rekha Deula (A.S.I.)



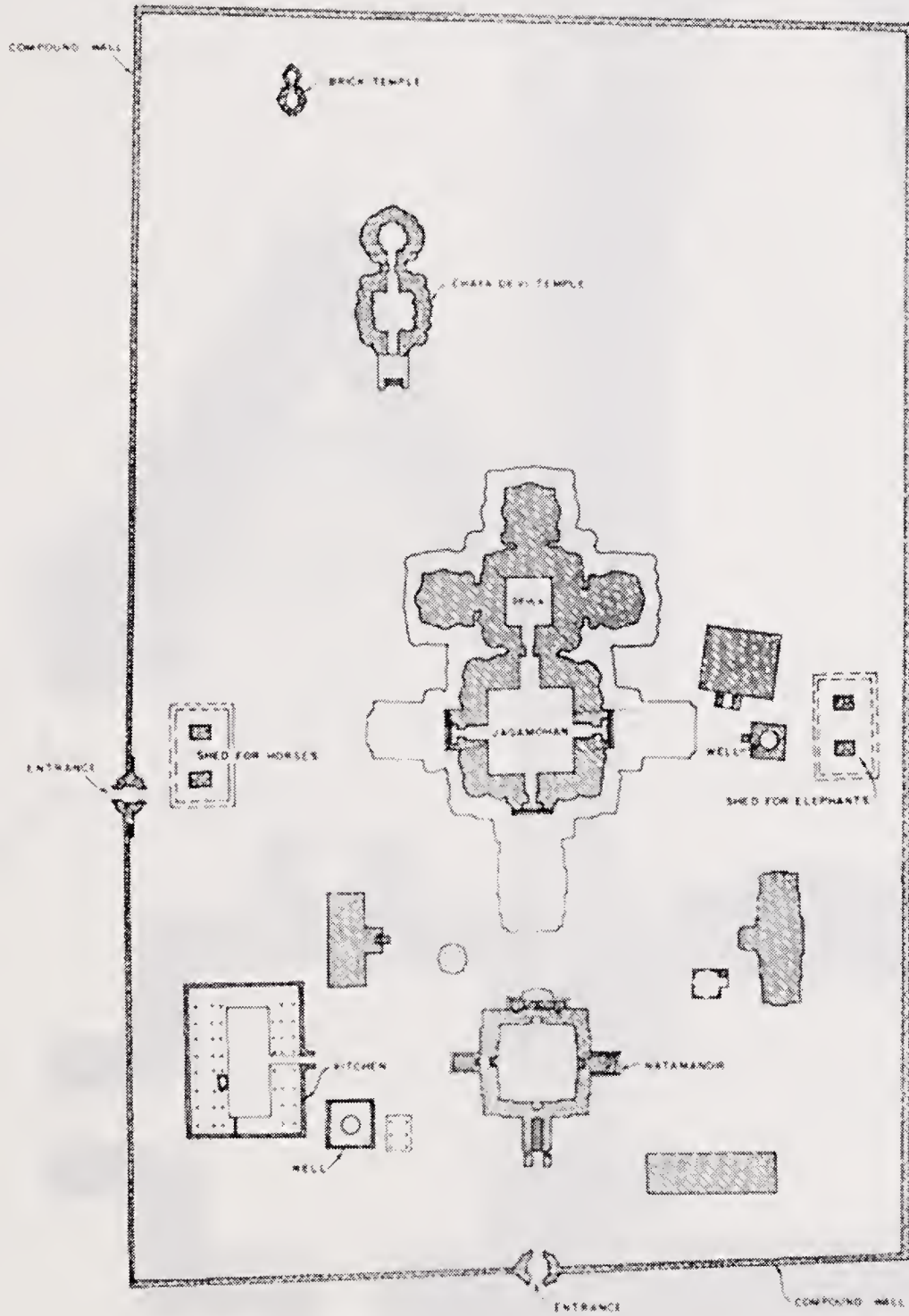


Principal components of a Pidha Deula (A.S.I)



# SITE PLAN OF SUN TEMPLE AT KONARAK

0 40 80 120 160 200 FEET



Site plan of Konark compound showing position of structures



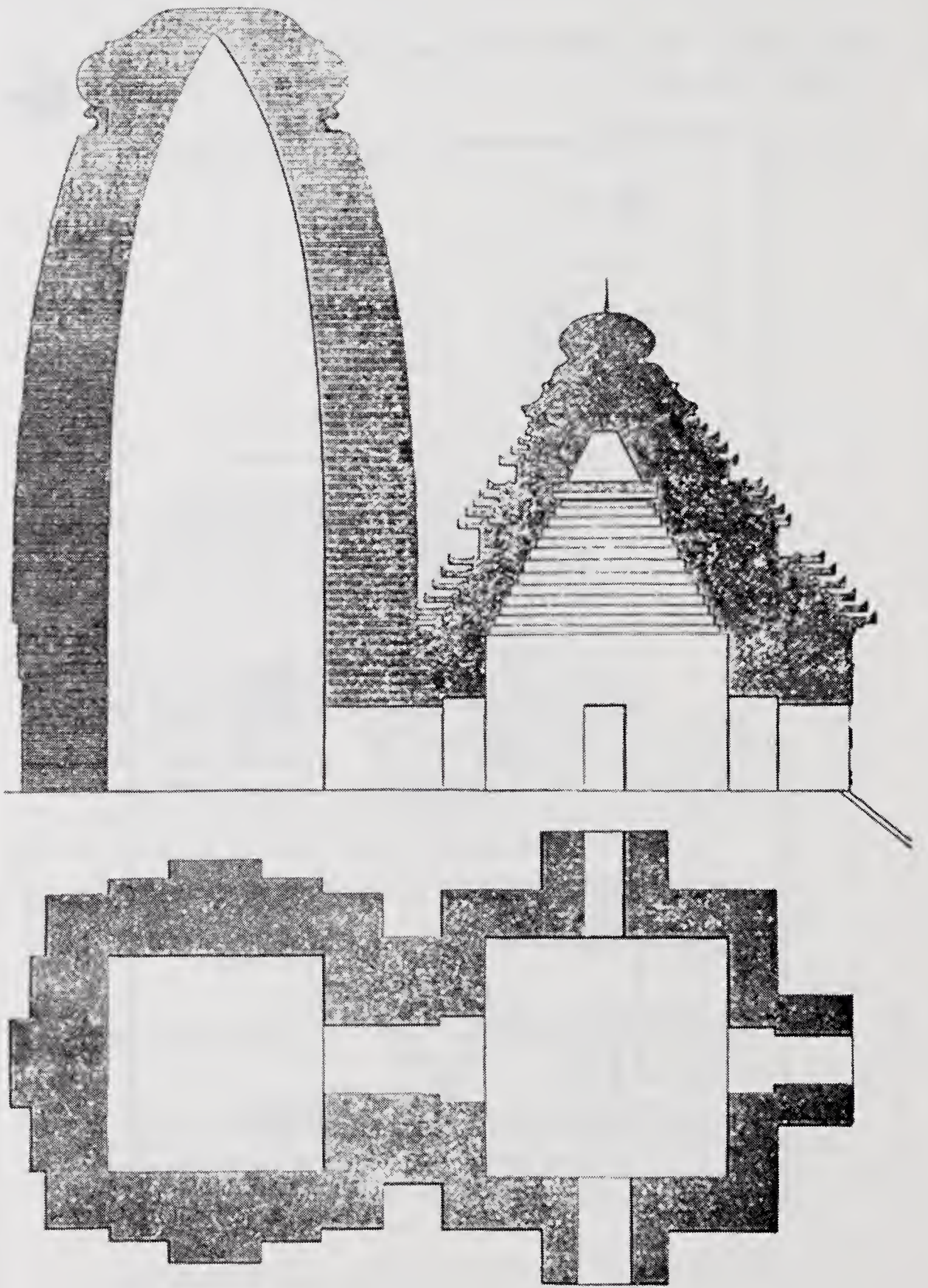
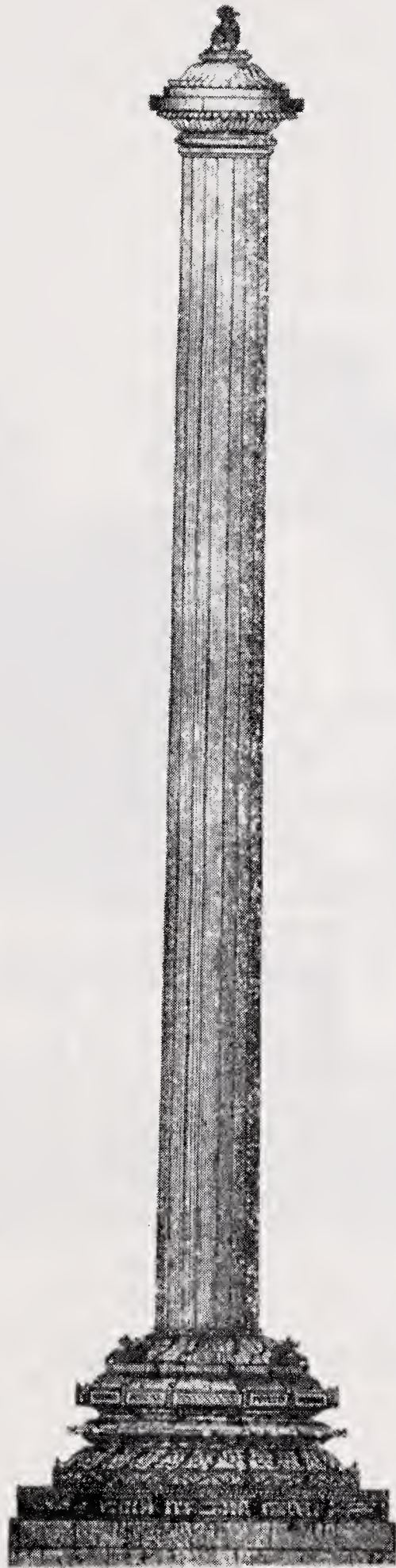


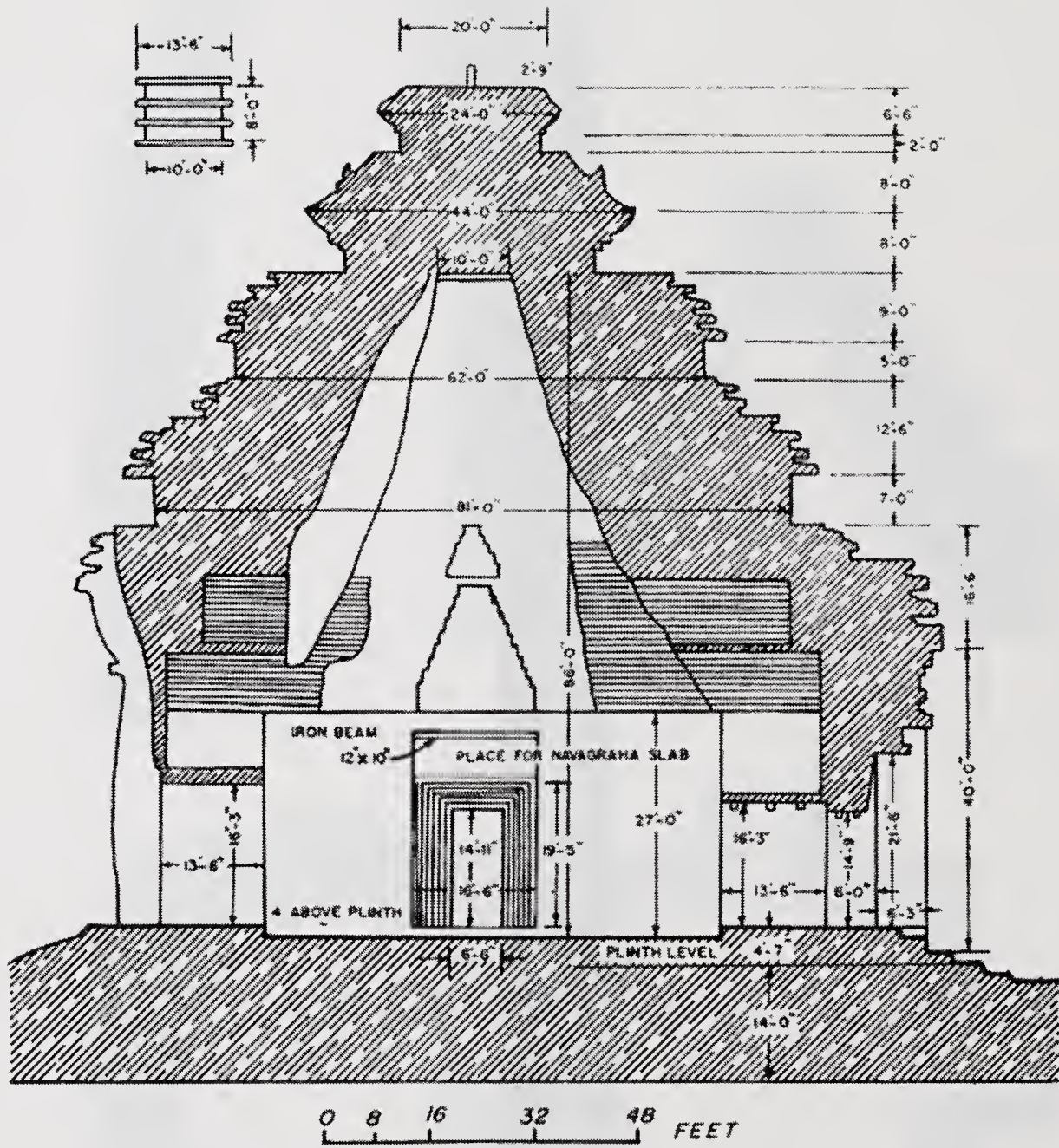
Diagram plan and section of deula jagamohana,  
(James Fergusson)





Aruna pillar (W.W. Hunter's Orissa)





Section of the Jagamohana





Black Pagoda 4 1/2 fms  
by the perspective at  
1/2 the depth 12 fa

(B P agoda n 1/2 w.  
by the perspective att  
1/2 the i.t depth 12 fa.)

Perspective view of Black Pagoda in 1680 : (Log Book of Berkley Castle), India Office Library Collection.







damaged condition. The lion-on-elephant figure, which projected from the eastern raha, is now seen on the ground in three pieces.

The superb Simhasana, within the sanctum for the presiding deity, proves that the temple was completed and its *puja* image was consecrated. Though idol is not there, irregular depressions on the surface of the platform at its eastern edge were possibly due to constant placing of ritual pots. The lovely lotus petals on the top most moulding have become defaced probably due to the touch of the devotees for a long period. When the temple was consecrated, as a part of the ceremony, small yupa or sacrificial pillars were erected and two such pillars are seen next to a small platform between the Jagamohana and the natamandira. The various versions of the *Madala Panji* (palm leaf chronicle of Jagannatha temple) suggest that the temple was consecrated. That the main temple was finished to the top becomes evident from figures of *vimana palas*, which were originally placed below the amalaka sila of the temple. If the spire of the temple was not completed or if it collapsed immediately after its completion, it is difficult to explain how a fragment of it survived till 1848. Moreover, the construction of the jagamohana and the natamandira would not have been undertaken had the main temple collapsed before completion. The subsidiary temples within the compound indicate that the site remained in a flourishing condition for a considerable period of time. The ruins of the kitchen in the South-eastern corner provide additional proof that the temple enjoyed full paraphernalia of worship.

The erection of the temple was undoubtedly the greatest achievement of Narasimha I. Hence the fact was repeatedly recorded in the copper plate charters of his successors. If the main temple had collapsed during construction or if it had been abandoned and left unfinished, the subsequent Ganga rulers would not have mentioned this monument with pride in their charters. The reference to this temple in the records of the successors of Narasimha I clearly proves that the temple was completed and the latest known reference made in the Kenduli plates of Narasimha IV of the Saka year 1305 (1384 A.D.) shows that at



that time the monument was in a perfect state of preservation and the presiding deity was under worship.

Moreover, there was evidence in the monument itself to support the fact that its construction was completed. A sculptured panel from Konark bearing an inscription in two lines has been removed to the Indian Museum, Calcutta.

The inscription reads

Line 1 – Sri va (vya) ya – bhandara-adhikari Valai-Naeka//  
Bhandara naeka

Line-2 – Alalu-Naeka/kostha-karana Angai-Naeka//

It is clear from the inscription that Valai Naeka was the *vyayabhandra-adhikari* (officer in charge of expenditure and stores), Alalu Naeka was the *bhandara-naeka* (chief officer of the stores) and Angai Naeka was the *kostha-karana* (accountant scribe of the treasury or granary). There is no doubt that the Bhandara mentioned in the inscription in the context of the sculpture, relates to the stores of the Sun temple and the officers referred to were dignitaries associated with the management of the temple. The question of assignment of duties connected with the rituals of the deity arises only after the completion and ceremonial installation of the image, and hence the names of the temple dignitaries preserved in the sculpture of Konark show beyond doubt that the temple was consecrated and the presiding deity was under worship. The inscription, on grounds of palaeography can be assigned to the 14<sup>th</sup> or the first half of the 15<sup>th</sup> century, thereby suggesting the continuance of worship there.

The *Brahama Purana* (13<sup>th</sup> century) prescribes the procedure for the pilgrims to conduct worship in the ksetra of Konaditya one should take bath in the sea. Then one should go to the Sun temple (*Suryalaya*) with flowers and with restrained speech, make three circumambulations, then enter the temple and worship the Sun god Bhannu. The text recommends the worship of Konark with various upacharas.

This indicates that the temple was finished and the presiding deity was under worship. The Sthala mahatmyas relating to Konark, mention several festivals such as magha saptmi, damana



bhanjika, car festival, etc. The *Saura Samuchya*, a later Orissan text, refers to twelve yatras (festivals) one in each month. These indicate that the presiding deity of Konark enjoyed worship for we cannot think of festivals without the installation of the deity. The procedure of performance of worship at Konark as given by the Puranas, has been mentioned in several later texts such as the *Tirthachinatamani* of Vachaspchi Misra (15<sup>th</sup> century) and the *Pramana Pallava* of Narasimha (13<sup>th</sup> century) both belonging to Mithila. Vachaspati Misra prescribed the worship of the Sungod, with identical verses borrowed from the Brahma Purana, indicating continuance of the worship in the Sun temple in the 15<sup>th</sup> Century. The *Oriya Mahabharata* of Sarala Das (15<sup>th</sup> century) contains a number of references on Konark as a tirtha visited by large number of pilgrims, especially on the occasion of the Maghasaptami festival. The *Kapila Samhita*, an Orissan text of the Suryavamsi period mentions Maitreyavane of Konark as an important centre of Sun worship in Orissa.

The *Tirtha Prakasa* of Mitra Misra also quotes the Koanarka-vidhi from the *Brahma Purana* which indicates that the temple was there and no modification was made in the procedure of worship. The *Tirtha-sara* of Nrsimha Prasad (1490-1515 A.D.) mentions Padma tirtha or Konark as one of the four principal tirthas of Orissa. The text refers to the river Pusyvati, the sacred Sangam and the Soma-tirtha in the vicinity of the place. Raghunandana (1520-1570 A.D.) in his *Purusottam Paddhati* refers to four important places of pilgrimage in Orissa. They are Viraja, Ekamra, Konark and Purusottama. From all such literary sources, it is evident that the importance of Konark as a tirtha did not decline till the sixteenth century. The important role played by the temple in the religious life of India is evident from numerous references in the later Puranas and other medieval literature. These describe the method of worship at the temple and emphasize its importance as a place of pilgrimage. These could hardly have been written if the temple had never been completed or not opened for worship. A further indication that the temple was actually standing is found in the *Bhakti-bhagavata*, a Sanskrit work



composed in 1510 A.D. by Kavidindima Jivadevacharya, the spiritual guide and minister of the Gajapati King Prataparudra Deva (1497-1541 A.D.). In that work, Jivadevacharya makes a mention of the Konark temple 'the banner of the steeple of which struck the heaven'. Jivadevacharya is certainly mistaken in assigning the temple to Narasimha II of the Ganga dynasty, but there is no doubt that the verses in praise of the temple were inspired by its actual sikhara which was intact at the time. The Oriya *Ramayana* of Balarama Das, composed in the reign of Gajapati king Prataparudra, shows that Bhaskara tirtha or Konark was in a flourishing condition. Therefore, Ramachandra is made to take bath in the river Chandrabhaga and is said to have stayed in the Bhaskara tirtha. During the time of Prataparudra Deva, Sri Chaitanya came to Puri, and it is known from the *Chaitanya Mangala* of Jayananda that the saint visited Konark. This shows that the place was not deserted. On the contrary, it was so famous that in the later part of the same century the temple as Hunter comments, 'wring as unwilling tribute' from a Mohammedan who was no other than Abul-Fazl, the celebrated historian of the court of Akbar (1556-1605 A.D.). His account of the temple as given in the *Ain-I-Akbari*, runs as follows:

“Near Jagannath is a temple dedicated to the Sun. Its cost was defrayed by twelve years revenue of the province. Even those whose judgment is critical and who are difficult to please stand astonished at its sight. The height of the wall is 150 cubits high and 19 thick. It has three portals. The eastern has carved upon it, the figures of two finely designed elephants, each of them carrying a man upon his trunk. The western bears sculptures of two horsemen with trappings and ornaments and an attendant. The northern has two tigers, each of which is rampant upon an elephant that it has overpowered. In front is an octagonal column of black stone, 50 yards high. When nine flights of steps are passed, a spacious court appear with a large arch of stone upon which are carved the Sun and other planets. Around them are a variety of worshippers of every class, each after its manner with bowed heads, standing, sitting, prostrate, laughing, weeping, lost



in amaze or in wrapt attention and following these are diverse musicians and strange animals which never existed but in imagination. It is said that somewhat over 730 years ago, Raja Narasing Deo completed this stupendous fabric and left this mighty memorial to posterity. Twenty-eight temples stand in its vicinity six before the entrance and twenty-two without the enclosure, each of which has its separate legend”.

It cannot be claimed that the account of Abul-Fazl is correct or accurate, but there is no doubt that in his time the temple was in a prosperous condition, and had a number of lesser temples round it. Abul-Fazl says nothing about the state of preservation of the temple. But the description, in no way leaves the impression that the monument was then in a dilapidated condition.

The *Bahr-al-asrar* of Mahmud b. Amir Wali notices both the temples of Jagannath and Konark in May 1626. This traveller from Balkh mentions that after seeing the famous car festival of Puri, he visited Konark. Regarding the temple of Konark he records as follows:

Having visited all the wonderful things, we set out to visit the idol house of Konark, situated five krosa (ten miles) away. We reached there in the evening. We spent that night very uncomfortably. In the morning we visited the temple. According to the Hindus this temple was constructed for the worship of the Sun god. The Hindus regard the Sun as the first avatar. These days Hindus do not worship the Sun god. For this reason Konark has also been deserted. It is situated near the Bay of Bengal. Its height is so great that once a Mughal who was known for his worksmanship and physical strength tried to shoot an arrow to hit the top but the arrow could not go beyond the half of the temple's height, and fell down in the sandy ground.

“There is a pillar of many coloured marble without joints or insertion, which has also been covered up by sand and whatever position is visible and apparent is more than fifty *dhara* (cubits)”.

Being an eye-witness account, the short description is more valuable than the account contained in the *Ain-I-Akbari* of Abul-Fazl. According to the description of the monument mentioned



above, the Sun god in Konark was not under worship. The temple seems to have been deserted and even the premises around the temple were engulfed by the drifting sand. The lofty temple, however, was still standing intact to a great height, in 1626. The 'pillar of many coloured marble' mentioned by Mahmud b. Amir Wali, was obviously the chlorite pillar called Aruna Stambha which now stands in front of Jagannatha temple at Puri. Abul-Fazl mentioned an 'octagonal column of black stone, 50 yards high' at Konark which was confused by Amir Wali as a marble pillar.

All the available versions of the *Madala Panji* record the tradition that the Sun-god of Konark was removed to Puri during the reign of Narasimhadeva (1621-1647 A.D.). An extract from the *Madala Panji*, published by M.M. Chakravarti, relates that the king visited the temple of Konark on the 9<sup>th</sup>. Anka of his reign (1628 A.D.) and had it measured through one Natha Mahapatra. By this time, due to the depredation of the yavana ruler Bakhar Khan, the presiding deity, called Maitraditya Virinicideva, had been removed to Niladrimahotsva temple in the compound of the Jagannath temple of Puri. Further it is known from the text that the kalasa and the padmadhvaja (lotus finial) of the temple had been broken by this date but the chumbakaluha-dharana (magnetic iron rod), which had originally held the kalasa in position, was still existing. This account of the *Madala Panji*, dated 1628, may be regarded as historically probable. It seems that towards the end of the 16<sup>th</sup> century or in early part of the 17<sup>th</sup> century, the temple was deserted for fear of attack by the Bakhar Khan and knew him personally. But he has not mentioned, any such attack on the temple. But it is clear that by 1626 A.D. Konark had already been deserted and a part of the monument was underneath the sand.

### **European sailors account of the Black Pagoda**

The stupendous temple, close on the seashore, attracted the attention of the sailors passing in the Bay of Bengal as it served as an excellent landmark for them. The Konark temple was known to early European sailors as the 'Black Pagoda' and the Jagannatha temple was known as the 'White Pagoda'. The



general colour of the stone used for building the temple is not black; but very probably the deserted temple assumed such a colour from a distance owing to the lack of proper care, and absence of periodical white washings, as was done in the case of the Jagannatha temple. As far as we know, the earliest mention of the term is found in the diary of Sir Streynsham Master, Governor of Fort St. George, Madras, in connection with a voyage in the Bay of Bengal from Balasore Road to Masulipatam in 1676. On December 23, 1676, Master saw the Konark temple and the Jagannatha temple and recorded in his diary as follows:

‘We sailed in sight of the Black Pagoda. The latter is that place called Juggernaut (Jagannatha) to which the Hindus from all parts of India come on pilgrimage’.

The unsigned memorandum of a voyage dated 1679 contains illustrations of juggernaut, other small pagodas and the ‘Black Pagoda’. The interesting sketch of the Black Pagoda shows the main tower and porch’ probably it is the earliest available drawing of the temple.

The ship ‘Berkley Castle’ with captain Talbott in command, passed near the Juggernaut the Black Pagoda on Sept. 2, 1680. In the log book there are two sketches of the Black Pagoda showing both the deula and the jagamohan. The perspective picture of the Black Pagoda seems to have been drawn virtually to the scale. The drawings give us an idea about the condition of the temple in 1679-80 and clearly indicate that both the deula and jagamohan were still standing to a great height.

Francois Martin, an officer of the French East-India Company, who was in India between 1673 and 1706, mentions the temple as Black Pagoda in his memoirs. In the account of Thomas Brwery the Black Pagoda is mentioned as being situated some 20 miles below the pagod jno-Garnaet. C.R. William records of the encounter between two ships— Sherborne and Marlborough— in September 1712, leading to the capture of the latter off the Black Pagoda. The log of a ship, which started its voyage from calpie on the Hugly on August 15, 1748, records that on the 20<sup>th</sup> it passed near the shore of the Black Pagoda and Jakernot



Pagoda. The details about the two pagodas are entered thus:

‘Wednesday August, 20, 1748, 9 (A.M.). Fair/saw the Black Pagoda, Dist 8 Miles of us. 11 (A.M.). Jakernot Pagoda, N.W. from ye Main yard/fair weather’.

The French map of Croisey (1764 A.D.) mentions the temple as “Pagoda Noire,” Captain John Ritchie, by order to the Bengal government, traced the coast of Orissa between the mouth of Kannaka river and the Black Pagoda in 1770-71. He was informed when at the South most opening of the Mahanuddy, that the Black Pagoda, was very near, on the south west”. The book of sailing directions by Samuel Dunn (1780 A.D.) makes an interesting reference to the Black Pagoda. It records:

“Four leagues E.b.N. of Juggernaut Pagoda is the Black Pagoda, which at a distance (like the former) resembles a large ship under sail, but on a nearer view it loses somewhat of its magnitude”.

Another reference to the Black Pagoda appears in the Indian Directory of James Horsburgh (1809). It says:

‘Black pagoda, in at 19\_52’ N: Ion 86\_8’E, stands also at a small distance from the sea, and bears from the Juggernaut Pagodas N 75\_E, distant 14 miles... When the Black Pagoda bears N.N.E., it appears like a high rock, rising abruptly at its east end, in shape of the gable end of a house, and a high pinnacle like a chimney projects upwards from its western end, from whence it gradually slopes down to the surface of the low land. There are three little clumps of trees or hammocks to the N.E. of it, and one to the S.W., which show their tops just above the white sand hills that form the coast. This pagoda being situated on even low reddish land, destitute of trees and being of less diameter and blacker than Jagannath pagodas, may be easily distinguished from the latter. They may be seen 6 leagues in clear weather, and when first discerned resemble ships under sail, although in some views the Black Pagoda appears like a huge rock’.

From the above mentioned account it may be inferred that a portion of the main temple was still standing by that date. The



‘high pinnacle which like a chimney’ projected upwards from the western end obviously represents the fragment of the tall spire of the main temple. In the first quarter of the 19<sup>th</sup> century, drawings of the temple, date 1809 and 1820, show the remains of the spire of the main temple just behind the Jagamohanana. One sketch of the temple dated December 12, 1809, shows the dilapidated jagamohana with a fragment of the main sanctuary. Another drawing by William George Stephen in 1812 shows only a portion of the Sikhara rising behind the Jagamohana. This water colour drawing depicts two Europeans entering the Jagamohana while their horses are standing near the entrance. The sketches of the temple made between 1679 and 1809 indicate the gradual process of ruin of the temple. Andrew Stirling, in 1825, referring to the ruin of the main observes, ‘A small section, however, still remains standing, about one hundred and twenty feet in height, which viewed from a distance gives to the ruin a singular appearance, something resembling that of a ship under sail’. The same account is also incorporated in the *East India Gazetteer* (1828 A.D.) of Walter Hamilton. In 1837, James Fergusson saw and prepared the drawing of the fragment of the main tower. ‘Of the great tower wrote Fergusson, only one fragment-one angle-remains, rising to the height of about 140 to 150 feet’. He remarks on the fragment that “when seen from the sea or from a distance on the other side, its effect is both singular and inexplicable. “Kittoe who visited the site in 1838, reports that of the great tower one corner is still standing to a height of 80 or 100 feet and has (at a distance) the appearance of a crooked column”. Alfred Bond, the Master Attendant at Balasore, visited Konark on February 8, 1839. In his report he says, “The Black Pagoda is inland from the sea about 1 ½ miles, and three remains of this ruin the eastern temple only, the western temple having nearly all fallen down, the only portion of it still remaining being a portion of a buttress about six feet in diameter and standing about 10 feet, above the eastern Temple, and this portion appears likely to fall on the eastern temple”. From this it is evident that even in 1839, a fragment of the main temple stood about 10 feet (3.05 metres) higher than



Jagamohana. It was in October 1848, that a terrible gale brought down the remaining fragment of the main temple.

Rajendra Lala Mitra, who visited the place at the close of 1868 wrote that “temple proper is also now totally dismantled, and forming an enormous mass of stones, studded with a few papal trees here and there, and harbouring snakes, from the dread of which few care to approach it”. Hunter, who visited Konark in 1870, described it as a ruin. In the photographs taken before the repair, the main temple looks like a mound of a debris. When the excavation of the main shrine was undertaken in the early part of the 20<sup>th</sup> century, it was noticed that the sanctum had been buried in a vast heap of debris more than fifty feet high. The volume of accumulation of debris can be imagined from the fact that it was necessary to lay down a light railway and remove all the most colossal blocks of stone by the aid of a running crane.

### **Causes of Ruin**

Mystery surrounds the monument as regards the fall of the main temple. There is something enigmatic about the ruin of Konark temple, when temples of nearly similar dimensions at Puri and Bhubaneswar, which were erected long before it, are still standing without major decay. Several theories have been put forward to explain the causes. Some scholars are inclined to believe that a natural catastrophe like earthquake or lightning brought about the collapse of the temple. However tradition is silent about any major earthquake in this area. Even if we assume that the main temple collapsed because of a severe earthquake shock, it is difficult to explain why this did not affect the Jagamohana which is just near it, as no effect of that tremor in shape of long cracks is noticed on it.

Lightning also could hardly have caused the destruction of the temple. In the first decade of the present century, the Jagamohana was twice struck by lightning but no major damage was reported.

A number of scholars ascribe the origin of the ruin to the subsidence of its foundations. James Fergusson, for example, was inclined to think that the failure of the marshy foundation that



supported so enormous a mass was by far the most probable cause. Rajendra Lala Mitra found in the falling of the four internal pillars of the Jagamohana, an additional proof of the sinking of the ground and observed, “what has unquestionably happened in the porch may be fairly assumed to have occurred in the temple”. However, this conjecture is not corroborated by the actual examination of the temple. The engineers of the Archaeological Survey of India, who have supervised the large scale repair of the temple since 1952, have not detected any instability of the foundations.

There is no doubt that the temple was built on thick layer of sandal but in course of time it became compact. The plinth, according to experts could have suffered settlement in the early stage of construction but now cracks related to settlement are not visible on the walls. As yet no continuous cracks in the walls have been reported. The excavation of the foundation to a depth of four meters has shown that the foundation has not stepped out beyond the plan area of the plinth. The assessment of temple by the UNESCO experts in 1987 confirms “that the foundations are sound”.

Bishan Swarup, and following him M.M. Ganguly and Krupasindhu Mishra held that the removal of the heavy top slab of the main temple by Kalapahar, general of Sulaiman Karrani of Bengal paved the way for the ruin of the monument.

However, there is no reliable evidence to show that Kalapahar was responsible for the ruin of the temple. Kalapahar no doubt attacked Orissa in 1568 and desecrated the Jagannath temple. This is mentioned in the Madala Panji and other local texts like the Chakadapothi. Niamatullah in his Makhazan-I-Afghan and Abul Fazl in the Ain-I-Akbari, mention Kalapahar’s raid on the Jagannath temple. But these texts are silent about his attack on Konark temple.

Depending on a local tradition, Krupasindhu Mishra was inclined to believe that Kalapahar attacked the Konark temple. It is said that when Kalapahar attempted to desecrate the Ramachandi temple, the goddess Ramachandi cleverly avoided



him. She appeared as a woman and, asking Kalapahar to wait near the door, went away with a pitcher to bring water. Kalapahar waited in vain and later realized the trick of the goddess. However, the same episode without the name Kalapahar occurs in the Oriya Mahabharata of Sarala Das. In the story, Ramachandi is represented as outwitting one Bada Chudanga by leaving her shrine with a pitcher in her hand. Saral Das flourished nearly a century before Kalapahar. Hence the episode associated with Kalapahar, appears to be a later interpolation.

There is a tradition that the temple was destroyed as a result of the curse of the sage Gautama on account of the immorality of the Sun-god. We are inclined to believe that the story, as given in one version of Sarala's Mahabharata is probably a late interpolation. A similar story – that the temple collapsed as a result of the curse of the sage Sumanyu-is narrated by Radhanath Ray (1848-1908) in his lyrical work Chandrabhaga. It is not desirable to attach any historical importance to such stories. The profusion of erotic sculptures on the walls of Konark, possibly led to the currency of such stories regarding the immorality of the Sun-god and when the temple came to ruin, people believed it to be a punishment for such moral laxity. It is therefore, not possible to extract any historical information from such legends.

In 1825, Andrew Stirling mentioned the story of the Kumbha Pathar or load stone, lodged on the summit of the temple. When it was removed in the Mughal times, by the crew of a ship the priests, at the violation of the sanctity, removed the image of the god to Puri temple and from that time the temple became deserted and went rapidly to ruin.

The drawing ashore of ships by the magnetic properties of the kumbha pathar appears improbable. It would have been a sheer impossibility to use iron implements near the temple had such a thing been a reality. The old sailing directories do not refer to such a phenomenon. However the desecration of the temple in the Moghul period is a historical probability, although a more specific conclusion must await positive evidence.

The tradition that the temple was desecrated and abandoned



during the reign of Narasimhadeva of the Khurda royal family appears to be historically probable. One version of the *Madala Panji* relates:

“Maharaja Sri Narasimhadeva, grandson of Maharaja Ramachandradeva, and son of Maharaja Purusottamadeva, came from Puri to see the temple (of Konark) in the 9<sup>th</sup> Anka of his reign (i.e., the 7<sup>th</sup> regional year) on the 21<sup>st</sup> day of the month of Mina, on a Monday, which corresponds to the 7<sup>th</sup> tithi. At that time Bakhar Khan was governing the Subah of Orissa under Sahahseli Badshah (Salim, Jahagir) the emperor of Delhi. Because of the atrocities of this Daemana (Yavana), the idol of Surya called Maitraditya-virancideva, had been removed to Niladri mahotsava temple situated within the enclosure of Purusottama temple (Jagannath temple of Puri)”. The Maharaja saw the temple and got it measured.

Maharaj Narasimhadeva ruled from 1621 to 1647 A.D. The date of his visit to Konark corresponds to March 17, 1628. Baqar Khan was one of the most oppressive Mughal Subedars of Orissa. J.N. Sarakar on the basis of a Persian work, *Masir-ul-Umara*, gives an account of his oppression over the peasants and zamindars. Therefore he was removed on June 24, 1632. It is not known whether during his period of governorship, Baqr Khan led an expedition to Konark temple in order to obtain its treasure. The measurements of the temple, taken in 1628 show that the main temple was without the kalasa and the lotus finial. It is likely that the kalasa had been dislodged either under the impression of its being of solid gold (*kanaka kalasa*) or in the belief that it contained wealth. The hypothesis of desecration of the temple, however, has not been corroborated by Mughal official sources. It is known from the travelogue of Mahmud bin-Amir Wali, that during his visit to Konark temple in 1626, the temple was not under worship. All the available versions of the *Madala Panji* agree that the Sun-god of Konark was removed to the Jagannatha temple during the reign of Narasimhadeva, though the exact role of the Muslim governor of Orissa is yet to be established on the basis of evidence.



The desecration of the Konark temple during this chaotic period was a serious blow to the religious life of Orissa. In the circumstances, the repair of the temple and the reinstallation of the deity were almost an impossible task. A brief reference to the political conditions of Orissa may help us to understand the situation. In 1568, with the death of Mukundadeva, Orissa lost her independence and the territory passed into the hands of the Afgan rulers of Bengal. Subsequently, Orissa was occupied by the Mughals. In 1592 Akbar's hold over Orissa was firmly established, when Man Singh conquered the territory and assumed the governorship of Bengal and Orissa. In the reign of Jahagir, the Mughal control over Orissa was further consolidated, and a number of Subedars governed the province.

When we take into account the political condition and the status of the Khurda Raja, it is not difficult to imagine how it was not possible on his part to protect the temple. By that time Jagannatha had emerged as the supreme god for the people of Orissa. It is no wonder, therefore, that when the Konark temple was desecrated, the ruler thought it expedient to transfer the worship to the Jagannath temple. Narasimhadeva of the Khurda Raj family was not an exclusive devotee of the Sun-god. Therefore it could not be expected that the king would take the lead in reinstalling the Sun-god at Konark. The decline in the status of the exclusive Sun-worshippers may have been another factor for the lack of initiative.

The beginning of decay obviously started with the desertion of the temple. The location of the temple near the sea-shore, heavy monsoon rain, growth of vegetation on the temple, sand blast, salt air-all accelerated the process of decay. The building material being khondalite stone and dry bedding of the stone blocks together with the use of iron dowels were probably the principal causes which led to cracking and splitting of stone. It is possible that corrosion of iron clamps, caused by salty water, led to splitting of stone for which they got detached. It is possible that due to expansion of iron beams or due to cracking, the internal pillars



collapsed which led to the fall of the lower ceiling of the Jagamohan.

To ensure permanence and durability of the structure was a difficult task, for such task required that every stone should be tested for its quality, and strength, for each, forming a link in a chain, was responsible for the durability of the whole fabric. If a particular stone was crushed because of its inferior quality or if lost areas on the temple developed because of weather effect, the whole equilibrium of the temple would be affected. In the case of Konark temple it is probable that some stones, because of their heterogeneous quality and the effects of weather, were dislodged and were not promptly repaired. The sheer vastness and heavy weight of the monument would result in the collapse of the structure. This process chiefly affected the main temple because it had a tall tower. In the case of the Jagamohana the pyramidal form of the roof and the comparatively broader base prevented the vertical line through the centre of gravity from falling outside the base.

That it was not possible to test the stones to ensure their quality, is easily understandable because of the nature of the work, which continued for many years and involved the employment of so many persons. The felspar rich khondalites with which the Konark temple is built are subject to quick decay, as the constituent felspar are altered to soft powdery kaolin through the action of water. In general, however, khondalite stone has lasted well. In 250 years, it has been estimated that St. Paul's Cathedral, London built of best Portland stone, has eroded by 30 mm and in case of Norwich Cathedral 95% of the outer stones have been renewed during nine centuries. The average decay of carved stone at Konark is only 2.4 mm. The proximity of the temple to the sea, which has added to its beauty, has proved to be a great disadvantage for the long life of the monument. Besides the cyclones and sand-storms, the effects of the saline sea-breeze have done much to account for the gradual deterioration of the monument.

As already mentioned the extant fragment of the sanctuary



was blown down by a terrible gale which occurred in October 1848. During conservation of the Jagamohana it has been reported that collapse of the Sikhara has caused a large hole in the roof of the Jagamohana.

It is known from the account of Andrew Stirling that during his time the local people took away iron clamps from the decorated building. He mentions that “the officers of the Marhatta government actually let down a part of the walls, to procure materials for building some insignificant temples at Puri”. As has been pointed out, the Aruna pillar which stood in front of the Jagamohana of Konark temple was brought to Puri by the Marathas. No record exists of how, in course of time, stones and images were removed from the deserted site. The clearance of sand from the enclosure showed that the compound wall had been robbed of its stones. Several images from Konark have found their way into the private collection of individuals and different museums of the world. Even a casual look at the Jagamohana will convince us that the khakhara and pidha-mudis have been robbed of their sculptures. In the last century, as Fergusson remarks, “The temple itself had a narrow escape from being employed to build a light house on false-point as the fort and palace of Barabati at Cuttack were pulled down for this laudable purpose”. In 1837 some of the finest parts of the Jagamohana were destroyed by the Raja of Khurda. “The Raja of Khoordah applied to the late magistrate Mr. Wilkinson for permission to bring away some black and white stones with which to repair a part of the temple at Jagannath. Permission was given and the Raja not only carried away the stones which were lying on the ground but dismantled the building. The Raja removed some statues to his residence and pulled down the navagraha slab which adorned the eastern doorway of the Jagamohana. Before that could be removed to Puri he was directed to remove no more stones of any kind”. Not only the Khurda Raja, but also other persons took away images from Konark. The Asiatic Society attempted to remove the Navagraha slab to its museum in Calcutta and in 1892 the slab was cut into two pieces to reduce its weight.



In 1893 eleven sculptures were removed to the Indian museum, Calcutta. These offer examples as to how private parties as well as institutions became eager to remove sculptures from the monument.

One major factor which hastened the process of ruin was the absence of timely repair. After the temple was abandoned it was never repaired. The continuance of the Muslim domination did not create the necessary atmosphere for undertaking the repair. The temple of Konark was not destined to last long in a perfect condition without repair. That the temple was not repaired during the memory of man is almost a fact. In 1929 a stone which was covered with moss and lichens, was examined by a reputed Botanist, Dr. P. Parija, who found 357 layers on it. It was surmised that one rainy season is necessary for one layer; 357 years must have elapsed for the formation of 357 layers. From this it is evident that since 1573 A.D., the monument has not been properly looked after. In a tropical country like India, when a monument is left abandoned, in course of time, it is covered by vegetation. Not only does this disfigure the monument, but in time the roots of the plants work their way into the masonry and tear it to pieces. The temple of Konark experienced a similar fate when the vegetation was not removed. In view of long years of neglect, there is nothing surprising about the dilapidation of the Konark temple. The decay rather appears to have been slow and a natural one. From the accounts of Stirling, Fergusson and Rajendra Lala Mitra, it can be asserted that even in the last century, for lack of repair, the temple was ruined gradually and slowly. The fragment of the sanctuary, which Stirling and others saw during their visits, could possibly have been preserved, had the British government desired it.

### **Conservation**

The initiative to preserve the monument came from the Marine Board as the temple served as an excellent landmark for the sailors. So they wanted to ensure that no alteration of appearance of Jagamohana is made by way of human vandalism. Alfred Bond, Master Attendant, Balasor who inspected the Black



Pagoda on February, 8, 1839 reported that the eastern temple (i.e. Jagamohana) is not likely to stand, more especially, should that portion remaining of the western temple (i.e. deula) fall on it. He proposed that to prevent the falling of the western temple on the eastern one the former be pulled down and the latter be blocked up and centre be filled to dome without any substantial change of appearance to be quite efficient as a landmark for maritime purpose but nothing substantial was done.

In 1858 J.B. Mactier, the officiating collector of Puri, examined the Black Pagoda and found that the work of ruin there is proceeding most rapidly. As the monument was covered with vegetation he sought permission from the commissioner to spend Rs.50/- from the town improvement fund for removing it. He proposed that to preserve the Jagamohana the top of the building should be supported by the pillars of masonry or the entire interior should be filled with stones and sand. But G.F. Cockburn, the commissioner, replied that, 'There is no reason whatever why a single rupee should be expended in keeping up the present detestable remaining part of the old temple'. In fact till 1881 not a single rupee was spent on its preservation.

In 1881, the commissioner of Orissa directed the Magistrate of Puri to take necessary steps for the conservation of the temple. However, the fund sanctioned was not adequate for a large scale repair. The vegetation which covered the roof was cleaned, the guardian animals like the elephants and horses were placed on special platforms, and the pair of lions on elephants were placed on the top of a mound, which proved to be in the Natamandira. Till the end of the century no major structural repair was undertaken for "want of funds".

In 1886 C.F. Worsley, Commissioner, Orissa Division noted 'No architectural remains in this division can be preserved without a large expenditure and Government will not expend a pie. So the bundle may be filled'.

In 1901, a new phase in the history of the temple began when major steps were taken to preserve the monuments. To save the jagamohana from possible collapse, the four entrances



were permanently closed. On the southern side a modern buttressing wall was provided for better preservation. Bishan Swarup, Executive Engineer in charge of conservation work, described the filling up the interior of the Jagamohana in 1903 as follows:

“It was at first proposed to fill in the inside of the building with hand packed stones up to height of 40 feet, and then build a central pillar to support of the roof. This proposal was after awards given up, as it was found the pillar could not stop but rather help, the falling in of the corbelled roof the horizontal arch pattern. It was then decided to fill the inside up to the top with sand after closing the doorways, and lining the walls all round with dry stone masonry, 15 feet wide, to counter balance the enormous horizontal thrust of the sand. The inner portion of the roof, which was badly damaged especially on the south and west sides, was repaired. This latter work was rather difficult, but it was, I may say, well-managed. For filling work the northern door which was in better condition than the other two was kept open, the other two having been closed. An opening was left in the dry masonry lining also and provided with girder lintels so that the masonry could be taken up to the roof. The room being quite dark after the eastern and southern doors were closed, the work had to be done with lamp lights in day time. After the masonry was completed, sand filling was done to such a height as could be managed through the northern door that was afterwards closed. The work could now be done only through the hole made in the pyramidal roof on the western side by the fall of the main tower... This hole was in its turn closed after the work of sand filling that could be done through it was done. To complete the sand filling a 3 inch hole was made vertically from the top by means of a diamond drill. This was 25 feet in length, and sand was poured through it by means of a funnel”.

The above mentioned work was completed in 1904 and since then there is no access into the interior of Jagamohana.

As a result of the removal of the sand and debris, the platform of the temple with wheels and horses, the Natamandira, the ruined



sanctuary, the Simhasana, the so called Chayadevi temple, etc. gradually came to light. By 1910 the essential work for the preservation of the monument was over. Without understanding the importance of the work of the conservators and their problems, it can be said that they failed to do justice to the temple. In case of Konark, the conservators can legitimately be blamed for the way they handled this edifice. If they wanted, they could have made use of the carved fragments at the appropriate places and the monument would have presented a better look.

Since 1939 the Archaeological Survey of India has been responsible for the conservation of the monument and from 1952-53 the temple has been undergoing special repairs as a result of the recommendations of a Committee of Experts appointed by the Government of India.

The Archaeological Survey of India had taken appropriate steps to make the temple watertight by grouting of foundation, rectification of slope and replacement of rusted iron dowels by copper dowels. The ruined compound wall has been reconstructed serving as a rectangular path around the temple to view to temple from various angles. The sand has been removed from the compound and to prevent drifting of sand, and salty breeze, extensive plantation of casuarin plantation has been undertaken to provide screening effect. Apart from structural conservation, chemical conservation has been pursued to prevent growth of moss and lichen. Salt affected sculptures are subjected to paper pulp treatment, cracks and fissures are treated with epoxy resin. The walls are periodically subjected to fungicidal treatment and preservative coats are applied. The temple is examined by experts to study various aspects of conservation. On the whole the structure is stable and does not pose any serious problem.

The remains of the main temple, survives to height of 10 meters and has no structural problems. The superstructure of Jagamohana, as a whole, is safe. But the Jagamohan remains packed with sand and stone. It has been claimed by some experts that the sandfill is not required for the overall strength of Jagamohana. The inspection has also revealed that the sandfill is



about 4 meters below the base of the amalaka. Therefore, sand is not giving support to the upper part of the Jagamohana as originally intended. Hence the Archaeological Survey of India is seriously considering to remove the sand filling. If there is no imminent danger to the Jagamohana, no tempering of the monument is desirable. If removal of sand is considered essential, it may be done from the top in a careful manner by continuous monitoring of its effect on the stability of the monument.

In 1985 the Bhubaneswar circle of the Archaeological Survey of India was formed and it has helped to handle the problem of conservation. In 1984, the Sun temple, Konark being considered to be of outstanding universal value to humanity, was listed as a World Heritage site. In spite of meticulous care and the sustained efforts of the conservators, the salt air constantly blowing from the sea, is slowly contributing to stone erosion and with passage of time the minute carving may become indistinct. As Professor A.L. Basham has said “if the world wishes Konark to be preserved for posterity, action and expensive action such as a developing country cannot afford alone must be taken quite soon”.



## GLOSSARY

- Anuraha* - Projection adjacent to the middle segment of saptaratha and nava-ratha temples.
- Anuratha* - Projection next to *kanika-paga* in *pancharatha* and *sapta-ratha* temples.
- Antarala* - Vestibule, chamber in front of the *sanctum*.
- Apsara* - nymph-like female divinities of the sky.
- Avatara* - an incarnation
- Ayudha* - a symbolical weapon or attribute in the hand of a divinity.
- Bada* - ‘wall’, vertical part of a temple between *pitha* and *gandi*.
- Bada deula* - ‘big temple’, it denotes the main temple.
- Bandhana* - set of mouldings joining the two *janghas*.
- Basanta* - name of the topmost moulding in the *pabhaga*, *bandhana* and *varanda*.
- Beki* - ‘neck’; cylindrical member above *gandi* and below *amla* of a *rekha* temple; same above *gandi* and below *ghanta* of a *pidha* temple.
- Beki-bhairava* - crouching figure in the *beki* of the temple placed on each *raha*.
- Beki-simha* - lion placed on the *beki* as a support of *amla*.



- Bhairava* - one of the fierce forms of siva.
- Bho* - an ornamental motif of a *chaitya*-window crowned by a *kirtimukha* with flanking gana figures.
- Bhoga-mandapa* - 'hall of offering'; the refectory hall of a temple; the structure is usually found in front of the *nata mandira*.
- Bhumi* - plane, horizontal division of the spire.
- Bhumi-amla* - amla demarcating one *bhumi* of the *gandi* from another.
- Bisama* - topmost course or courses of the spire immediately below the *beki*.
- Chaitya* - ornamental motif in the form of a stylised window.
- Chhajja* - projecting member over doors, windows or niches.
- Darsana* - visual glimps of the deity.
- Deula* - a general name for the temple, also denotes the sanctuary as distinguished from the audience chamber (*jagamohana*).
- Devadasi* - dancing girl attached to a temple.
- Devi* - goddess.
- Dhvaja* - flag
- Dikpalas* - guardians of the eight quarters such as indra (east), agni (south-east), yama (north), nirriti (south-west), varuna (west), vayu (north-west), kubera (north) and isana (north-east).
- Dipa* - lamp.
- Dopichha-simha* - figures of lion with one forepart and two hind parts right angles to each other placed on the *beki* of the temple.



- Dvarapala* - guardian of the door, door-keeper.
- Gada* - mace, emblem of visnu.
- Gaja-lakshmi* - auspicious motif of lakshmi being bathed by elephants.
- Gaja-vidala* - (Sanskrit *gaja-vyala*), a rampant lion springing on a crouching elephant.
- Ganas* - a group of demi gods attending on siva.
- Gandharvas* - a class of celestial musicians.
- Gandi* - trunk, curvilinear spire or pyramidal roof between the bada and *mastaka* of a temple.
- Garbhagriha* - innermost chamber of the temple containing the image or symbol.
- Garbhamuda* - lowermost ceiling of the *sanctum*.
- Gavaksa* - window of the *jagamohana*.
- Ghanta* - 'bell', bell-shaped member set in the finial of a *pidha*, temple also called *sri*.
- Grahas* - planets, they are depicted in a line on the architrave above the lintel of the main doorway.
- Jagamohana* - audience chamber or hall in front of the *sanctum*.
- Jangha* - 'thigh' the broad part of a temple, vertical wall of the bada above the *pabhaga*; the lower one between the *pabhaga* and *bandhana* is called lower *jangha*, the upper one between the *bandhana* and *varanda* is called upper *jangha*.
- Kalasa* - water jar; the structure in the shape of a pitcher placed as crowning element of the temple.



- Kani* - 'pointed edge', fillet having a sharp edge.
- Kanika-paga* - corner segment, outermost Pilaster of a temple.
- Kanti* - 'throat', vertical recess between *pidhas*.
- Kanya* - damsel; decorative female figures on the body of a temple.
- Khakhara-deula* - a temple with a semi-cylindrical crowning member.
- Khakhara-mundi* - miniature representation of khakhara temple used as an ornamental motif.
- Khandi* - recess between pagas.
- Khapuri* - 'skull'; structure resembling a flattened bell shaped member above the *amla*, forming a part of the finial of the temple.
- Khura* - 'hoof'; lowermost moulding with a shaped profile used in the *pitha* or *pabhaga* of a temple.
- Kirita-Mkuta* - conical type of crown studded with jewels worn by Visnu and Surya.
- Kirtimukha* - 'face of glory', decorative motif with a face of a lion from the mouth of which festoon of pearls hang down.
- Kshetra* - sacred place or land.
- Kubera* - chief of yakasas, a dikpala.
- Kumbha* - water pot; pitcher-shaped moulding of the pabhaga, a class of base moulding.
- Kunda* - a sacred water reservoir for bathing.
- Linga* - the phallic emblem or sign of Siva.
- Makara-torana* - torana or arch with makara motif at the base.



- Mandapa* - porch; hall of a temple
- Mandira* - temple
- Mastaka* - 'head'; crowning elements above the gandi of a temple
- Mithuna* - amorous couple
- Moksha* - liberation; freedom from the cycle of birth and death.
- Muhanti* - vertical portion at the base of khura, khakhara or khapuri.
- Mukhasala* - 'front hall; pidha temple in front of the sanctuary; also known as jagamohana.
- Naga* - 'serpent'; figure with a human bust and serpent tail carved on the walls.
- Naga-stambha* - pillar encircled by naga figures.
- Nata-mandira* - dancing hall of a temple.
- Nataraja* - siva as the lord of cosmic dance.
- Navagrahas* - nine planets; the *navagrahas* are usually depicted on the lintel or architrave of the front doorway of a temple, they are Ravi, Soma, Mangala, Buddha, Brihaspati, Sukra, Sani Rahu and Ketu.
- Nava-ratha* - a temple having the nine projecting *pagas* on its façade.
- Nayika* - female figures carved in various poses on the walls of a temple.
- Nisa-deula* - small shrine erected in front of the raha niche of the *deula*.
- Pabhaga* - 'foot part'; division of the wall corresponding to the foot of the bada; a set of mouldings forming the lowest part of the bada of a temple.



- Pada* - foot; the lowest division of the *bada* of a temple.
- Padma* - lotus
- Paga* - segment, also known as *ratha*.
- Panchanga* - bada with five divisions, also called panchakarma.
- Pancha-ratha* - temple having five rathas on its façade.
- Parsva-devatas* - accessory deities placed in the outer niches of the central projections of the sanctuary. In a Siva temple ganesa on the south, Karttikeya on the west and Parvati on the north are usually the *parsvadevatas*.
- Pata* - moulding with a square edge.
- Pidha* - flat wooden seat; projecting elements with which the roof of the *pidha-deula* is composed.
- Pidha-deula* - temple of which the pyramidal roof is made of *pidhas*.
- Pidha-mundi* - a structural motif; miniature representation of a *pidha* temple used as an ornamental motif.
- Pista or pitha* - pedestal; stylobate; platform
- Potala* - chapter, group of *pidhas*.
- Pradashina* - circumambulation; waling in clockwise direction keeping the deity on the right.
- Puja* - ritual worship of the deity.
- Raha* - projected central segment of a temple; the *parsvadevatas* are housed in its niche.
- Rekha-deula* - order of temple characterized by a curvilinear tower; this type of structure is usually limited to the main temple.



- Sakha* - literally a branch; jamb of a door frame.
- Salabhanjika* - woman and tree motif.
- Sandhi-sthala* - wall portion connecting the *deula* with the *jagamohana*.
- Sankha* - conch-shell.
- Sapta-ratha* - temple with seven pilasters on its façade.
- Sikhara* - spire; tower of a temple.
- Silpa sastra* - ancient Indian treatise on building construction and allied arts.
- Simha* - lion
- Simhasana* - lion throne; pedestal of the presiding deity.
- Sri* - bell-shaped member above beki in *pidha* temple.
- Stambha* - column, pillar
- Sthapati* - master craftsman.
- Surasundari* - heavenly damsel; celestial beauty; a motif in temple art.
- Tanku* - projection in the form of a triangle, semi-circle or quadrant of a circle at the edge of mouldings or *pidhas*.
- Tirtha* - holy place of pilgrimage.
- Torana* - arch, gateway in the form of arch rising from two pillars.
- Tri-ratha* - temple with three *pagas* on each side.
- Trisula* - trident' attribute of Siva
- Vahana* - 'vehicle'; especially the divine animal or bird on which a god habitually rides according to Hindu mythology.



- Vajra-mastaka* - ornamental motif on the gandi of the temple consisting of a *chaitya*-window motif with *kirtimukha* at the apex.
- Vajra-mundi* - ornamental motif with a highly intricate *chaitya*-window design on the façade of the roof.
- Varanda* - crowning set of mouldings of the bada separating the cube of sanctum from the *sikhara*.
- Vidyadhara* - mythical being who flies in the sky, usually carrying a garland.
- Vimana* - towered sanctuary, main temple in which the deity is enshrined.
- Virala or vidala* - (Sanskrit *vyala*) mythical monster used, as a sculptural and architectural motif, the representation of *vidala* is of various types, e.g. *gaja-vidala*, *nara-vidala*, etc.
- Yajna* - a sacrificial rite.
- Yantra* - geometric diagram; abstract symbol of divinity used as a tool of meditation.
- Yatra* - procession in religious festivals; pilgrimage.



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## ERRATA

Page No.	Line No.	Printed As	Read As
1	13	Agnrikona	Agnikona
2	10	Brhamanas	Brahmanas
2	13	Hsuan Tang	Hiuen Tsang
3	17	Purna	Purana
6	6	Samha	Samba
6	16	Mahatmnyas	Mahatmyas
6	16	Read after Mahatmyas of “four holy places of Orissa such as Ekamra (Bhubaneswar), Purusottam, (Puri) Konark and Viraja (Jaipur). The ksetra Mahatmyas of”	
6	17	eight	eighth
6	34	Suryaloke	Suryaloka
8	20	to be	to
8	26	Matmyas	Mahatmyas
14	33	Jagannanatha	Jagannath
15	2	akayear	sakayear
15	5	varse	verse
17	5	Chadrabhaga	Chandrabhaga
20	1	travalogue	travelogue
20	31	Purnaa	Purana
21	15	Naraisimha-I	Narasimha-I
24	26	quilt	quality



<b>Page No.</b>	<b>Line No.</b>	<b>Printed As</b>	<b>Read As</b>
26	11	quilt	quality
26	28	kalasaa	kalasa
29	8	khakhra	khakhara
30	20	slops	slop
34	4	Chodagngadeva	Chodagangadeva
34	28	temple	temples
40	24	larger	longer
41	18	mastaa	mastaka
41	19	page	paga
43	6	There	The
47	29	beautiful	beauty
49	20	Arun	Aruna
51	21	Brahanesvar	Brahmesvar
52	35	Tang	Tsang
54	18	kakhara	khakhara
55	8	riches	niches
55	17	contain	containing
55	23	khakra	khakhara
56	1	moulings	mouldings
56	17	sakhs	sakhas
57	31	construct	constructed
59	1	pedstal	pedestal
59	16	Gaurda	Garuda
59	20	Shastras. The	Shastras the
59	21	Lingarajas	Lingaraja
59	27	end	and
60	3	Purna	Purana

Page No.	Line No.	Printed As	Read As
61	5	pyramid	pyramidal
61	11	duela	deula
63	5	pristha	pitha
63	20	Mahandi	Mahanadi
64	34	upaha	upana
65	7	persvedevatas	persvadevatas
66	28	Coormaraswamy	Coomaraswamy
66	32	belnding	blending
67	11	read after in front of the “feet of the Sun god and drives the chariot holding the reins of the”	
67	30	above	Above
70	9	Ranu	Rahu
70	28	Delete after who has “on the right leg, this ornament being absent in the case of Ketu, who has”	
83	19	embraoded	embraced
85	22	Dasa	Das
90	17	blocked	block
93	19	Koanarka	Konarka
94	2	Prataprarudra	Prataparudra
95	28	warksmanships	workmanship
95	33	is	in
99	5	Jagamohanana	Jagamohana
101	12	sandal	sand
105	30	mn	mm
109	8	after awards	afterwards















The Sun temple of Konark in Orissa, also famous as the Black Pagoda, is undoubtedly one of the finest monuments of India. Even in ruins, the temple complex is a magnificent monument where the vitality and spirit of a bygone creative age in the history of Orissa are echoed even today in its life like sculptures. It has been declared as a World Heritage Monument for its outstanding universal value to humanity.

The author Prof. Karuna Sagar Behera, an archaeologist and historian of repute has written this book with the broad objective to discuss all aspects of Konark, its mythology, history, architecture, sculpture and conservation etc. It is hoped that this concise narrative and the photo plates will help all those who want to know Konark in the proper perspective.



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